A KEY TO THE GRASSES OF THE NORTHERN TERRITORY, AUSTRALIA

Bryan K. Simon
Peter Latz

NORTHERN TERRITORY BOTANICAL BULLETIN No. 17
CONSERVATION COMMISSION OF THE NORTHERN TERRITORY

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INTRODUCTION

Concurrent with the preparation of a second edition of *A Key to Australian Grasses* we have been working on a Northern Territory subset of the key. This is primarily for the use of taxonomists, ecologists and naturalists with an interest in the identification of grasses of the Northern Territory.

Naturalised entities are indicated by an asterisk (*).
Distribution of entities within the Northern Territory are indicated by the numerical codes used for the Northern Territory in *Census of Australian Vascular Plants* by R.J.Hnatiuk (1989) [ABRS: Canberra] Fig. 1:-

25 - Darwin and Gulf Region 26 - Victoria River Region 27 - Barkly Tableland Region
28 - Central Region North 29 - Central Region South

Distribution of entities for Australian states are indicated by the abbreviations of the states:-

NSW - New South Wales VIC - Victoria TAS - Tasmania
SA - South Australia WA - Western Australia
QLD - Queensland

The couplets have been constructed to be brief and unambiguous and they are based almost entirely on flowering material. When a single character was considered to have conclusively separated a taxon from its partner in a couplet this was considered adequate from the point of view of identifying the taxon. Two or more characters have only been used in couplets where there is a need for more than one character to distinguish a taxon from the opposing member of a couplet. In a few cases triplets have been used instead of couplets where it was thought the key data were better expressed this way.

Where an entity is referred to by a collector's number, this entity is thought to be new and is either in the process of being published or will be some time in the future.

As the Flora of Australia accounts are prepared there will be taxonomic and nomenclatural changes resulting from more in-depth research.

CLASSIFICATION OF NORTHERN TERRITORY GRASSES

Ideas on the classification of grasses are in a constant state of flux and work in this field is currently being conducted in many centres. The classification presented here is a formal representation of views presented at an international symposium on grass systematics and evolution at the Smithsonian Institution, Washington DC. in 1986.

The taxonomic groupings of genera are arranged in a hierarchy of four ranks in descending order: Subfamily (with suffix -oideae), Supertribe where recognised (with suffix -odae), Tribe (with suffix -eae) and Subtribe (with suffix -inae).

I. BAMBUSOIDEAE	
ORYZODAE	
Oryzeae	Leersia, Oryza
BAMBUSODAE	
Bambuseae	Bambusa
III. ARUNDINOIDEAE	
Aristideae	Aristida
Arundineae	Amphipogon, *Arundo, Elytrophorus, Monachather, Phragmites, *Schismus, Triraphis
Eriachneae	Eriachne, Pheidochloa
Micraireae	Micraira
IV. STIPOIDEAE	
Stipeae	Stipa
V. POOIDEAE	
TRITICODAE	
Bromeae	*Bromus
Triticeae	
POODAE	
Aveneae	
Agrostidinae	*Polypogon, Agrostis
Aveninae	*Avena,
Poeae	*Lolium, Poa, *Vulpia
VI. CHLORIDOIDEAE	
Cynodonteae	
Chloridinae	Brachyachne, Chloris, Cynodon, Enteropogon, Microchloa, Oxychloris,
Eleusininae	Acrachne, Dactyloctenium, Diplachne, Ectrosia, *Eleusine Eragrostis, Heterachne, Leptochloa, Tripogon, Triraphis
Lepturinae	Lepturus
Pommereullinae	Astrebla
Sporobolinae	Sporobolus
Traginae	Perotis, Tragus
Pappophoreae	Enneapogon
Triodieae	Plectrachne, Symplectrodia, Triodia
VII. PANICOIDEAE	
PANICODAE	
Arundinelleae	Arundinella
Chamaeraphideae	Chamaeraphis, Pseudoraphis
Isachneae	Coelachne, Isachne
Neurachneae	Neurachne, Paraneurachne, Thyridolepis
Paniceae	
Cenchrinae	Cenchrus, Pennisetum, Pseudochaetochloa
Melinidinae	*Melinis

Panicinae	Alloteropsis, Brachiaria[1], Digitaria, Echinochloa, Eriochloa, Hygrochloa, Hymenachne, Oplismenus, Paractaenum, Panicum, Paspalidium, Paspalum, Sacciolepis, Setaria, Uranthoecium, *Urochloa, Whiteochloa, Yakirra
Spinificinae	Spinifex, Thuarea, Uranthoecium, Xerochloa, Zygochloa
ANDROPOGONODAE	
Andropogoneae	
Andropogoninae	*Andropogon, Cymbopogon, Schizachyrium
Anthistiriinae	Heteropogon, Hyparrhenia, Iseilema, Themeda
Arthraxoninae	Bothriochloa, Capillipedium, Chrysopogon, Dichanthium, Sorghum, Spathia, Vetiveria
Chionachninae	Chionachne
Dimeriinae	Dimeria
Ischaeminae	Ischaemum, Sehima,
Rottboellinae	Elionurus, Mnesithea, Ophiuros, Rottboellia, Thaumastochloa
Saccharinae	Eulalia, Germainia, Imperata, Pseudopogonatherum

Note: Critesion (*Hordeum*) is an infrequent adventive in the NT and is not included in this Key.

NOTES ON GRASS IDENTIFICATION

Identification of grasses may be done by matching material with correctly named herbarium specimens, photographs or illustrations, by asking a grass taxonomist or by using botanical keys. Botanical keys are artificial in that they are an aid to identification and may or may not place related taxa together. If keys were constructed to be completely natural they would be very difficult to use for identification.

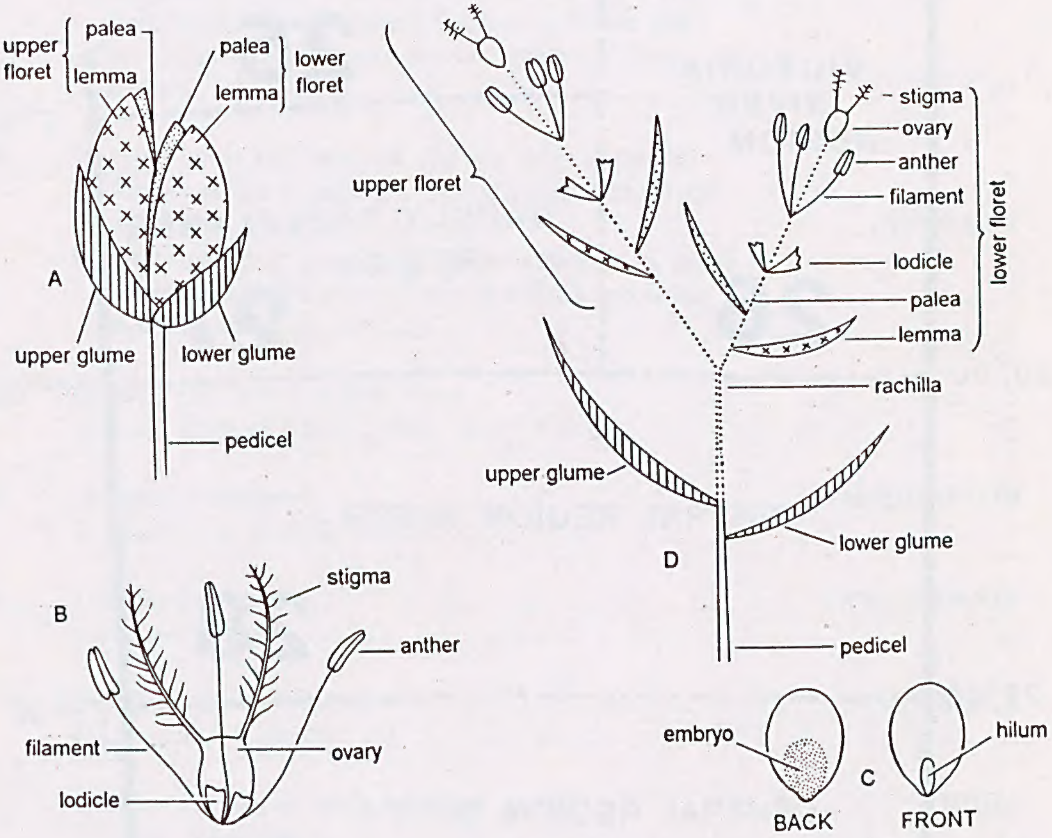
One finds however that a large number of related grass taxa do key out together in many keys e.g. andropogonoids and panicoids usually group together as the spikelet characters in these groups are useful for both classification and identification.

Hints for Spikelet Dissection

1. Use sharp dissecting tools - Two different types of scalpels are ideal, one with a handle with a rough surface for cutting and the other, more conventional one for keeping the spikelet steady.
2. Dissect the spikelet in a drop of water on a microscope slide, so that there is complete freedom of movement of the specimen relative to the working surface.
3. For measuring one can used mm graph paper under the slide, a separate mm rule alongside the part to be measured or a micrometer eyepiece.

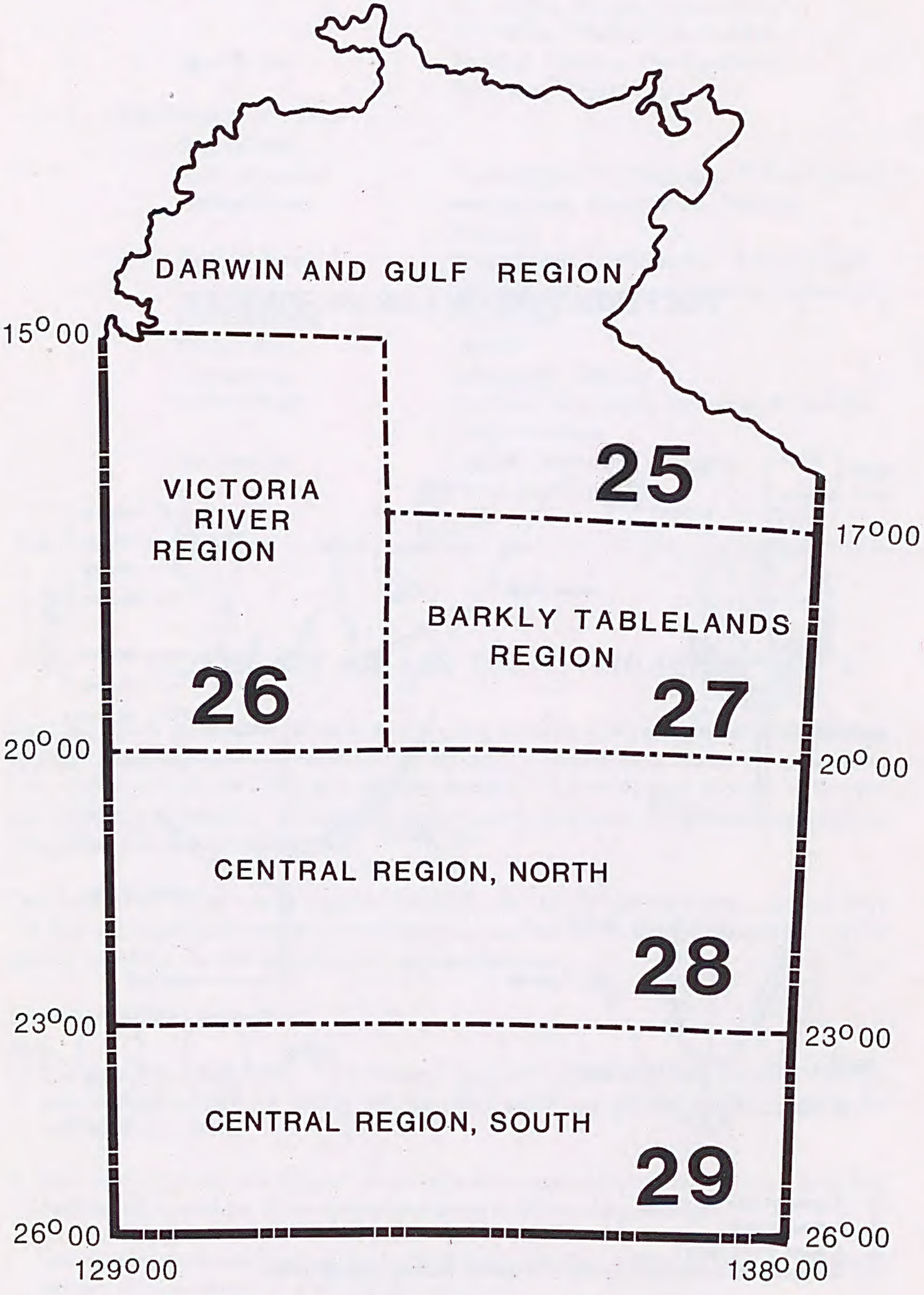
4. Use both white and black backgrounds behind the part being examined, as necessary. Membranous and translucent scales, lodicules etc are difficult to see against a white background.

THE STRUCTURE OF A GRASS SPIKELET



A. A spikelet with two florets
B. A grass flower
C. A grass fruit (grain)
D. An expanded schematic diagram of a spikelet with two bisexual florets

BOTANICAL PROVINCES OF THE NORTHERN TERRITORY



KEY TO GENERA

1. Culms hard and woody 2
Culms usually herbaceous 4

2. Bamboos; leaf-blades pseudopetiolate .... **BAMBUSA**
Reeds; leaf-blades not pseudopetiolate 3

3. Lemmas hairy; pedicels not hairy .... ***ARUNDO**
Lemmas not hairy; pedicels with long hairs .... **PHRAGMITES**

4. Leaves spirally arranged, <10 mm long .... **MICRAIRA**
Leaves arranged in two rows, >10 mm long 5

5. Spikelets with 1 to many florets, but if 2-flowered, either with rachilla extension, or both florets or lower one bisexual, or spikelets falling from above glumes and awnless 6
Spikelets 2-flowered, without rachilla extension, lower floret male or barren, upper bisexual or female and usually different in appearance or spikelets falling entire 51

6. Spikelets borne alternately on opposite sides of axis of solitary spikes or racemes, spikelets placed broadside on to axis .... **LEPTURUS**
Spikelets usually in panicles or 1-sided spikes or racemes, rarely on opposite sides of axis of solitary spikes but then edgeways-on 7

7. Lemmas cleft into 3 or more lobes 8
Lemmas entire or bilobed, rarely with 1-5 awns 13

8. Spikelets 1-flowered .... **AMPHIPOGON**
Spikelets 2- or more-flowered 9

9. Lemmas 9-lobed .... **ENNEAPOGON**
Lemmas 3-lobed 10

10. Inflorescence a 1-sided raceme .... **ASTREBLA**
Inflorescence a panicle 11

11. Lemmas awnless or rarely aristulate .... **TRIODIA**
Lemmas 1-3-awned 12

12. Hermaphrodite florets at least 2; rachilla not changing with maturity .... **PLECTRACHNE**
Hermaphrodite floret 1; rachilla elongating with maturity .... **SYMPLECTRODIA**

13. Spikelets with 2 or more fertile florets or if with 1 fertile floret, with rachilla projection or sterile florets above it 14
Spikelets with 1 fertile floret, with or without 1 or 2 male or sterile florets below it, and 1 or 2 above it 36

14. Spikelets with 2 florets, without rachilla projection 15
Spikelets with 3 or more florets or if with 1-2 florets rachilla projection is present 18

15. Upper glume twice length of lower glume .... **PHEIDOCHLOA**
Glumes ± equal in length 16

16. Glumes 5-11-nerved .... **ERIACHNE**
Glumes 1-3-nerved 17

17. Both lemmas hardened .... **ISACHNE**
Only lower lemma hardened .... **COELACHNE**

18. Glumes shorter than lowest floret 19
Glumes longer than lowest floret [*but see Leptochloa*] 34

19. Lemmas usually 1-3-nerved 20
Lemmas 5-many nerved 30

20. Lemmas 3-awned .... **TRIRAPHIS**
Lemmas 1-awned or without awns 21

21. Lemmas notched, toothed or lobed at apex 22
Lemmas entire at apex 24

22. Inflorescence a spike .... **TRIPOGON**
Inflorescence of few to many racemes 23

23. Lemmas rounded to flattened on back .... **DIPLACHNE**
Lemmas keeled on back .... **LEPTOCHLOA**

24. Inflorescence digitate 25
Inflorescence open, not digitate 27

25. Axis of digitate spike ending in a bristle .... **DACTYLOCTENIUM**
Axis of digitate spike ending in a spikelet 26

26. Lemmas with a small awn .... **ACRACHNE**
Lemmas without an awn .... ***ELEUSINE**

27. Lemmas with an awn 28
Lemmas without an awn 29

28. Spikelets in globose clusters; palea winged .... **ELYTROPHORUS**
Spikelets in dense to loose panicles; palea not winged .... **ECTROSIA**

29. Lemmas with winged keels .... **HETERACHNE**
Lemmas without winged keels .... **ERAGROSTIS**

30. Ovary crowned with a hairy appendage .... **BROMUS**
Ovary without an appendage 31

31. Inflorescence an open or contracted panicle 32
Inflorescence spicate 33

32. Lemmas keeled .... **POA**
Lemmas keeled or flattened on back .... ***VULPIA**

33. Inflorescence digitate .... ***ELEUSINE**
Inflorescence a single spike .... ***LOLIUM**

34. Ligule membranous .... ***AVENA**
Ligule ciliate 35

35. Lower leaf sheaths woolly at swollen base .... **MONACHATHER**
Lower leaf sheaths not woolly and base not swollen .... ***SCHISMUS**

36. Inflorescence a spike or simple or digitate raceme 37
Inflorescence a panicle 44

37. Spikelets in 1-sided spikes or racemes 38
Spikelets on opposite sides or all round an inflorescence axis 43

38. Spikelet with 1 floret; lemmas unawned 39
Spikelet with 2 or more florets; lemmas awned 41

39. Glumes shorter than floret .... **CYNODON**
Glumes longer than floret 40

40. Spikes digitate .... **BRACHYACHNE**
Spikes solitary .... **MICROCHLOA**

41. Lowest lemma dorsally compressed .... **ENTEROPOGON**
Lowest lemma laterally compressed 42

42. Lemmas conspicuously expanded and wing-like .... **OXYCHLORIS**
Lemmas not expanded and wing-like .... **CHLORIS**

43. Spikelets burr-like with hooked spines .... **TRAGUS**
Spikelets not burr-like .... **PEROTIS**

44. Glumes absent or rudimentary 45
Glumes well developed 46

45. Spikelets without sterile lemmas below a fertile lemma .... **LEERSIA**
Spikelets with two sterile lemmas below a fertile lemma .... **ORYZA**

46. Lemmas rigid, cylindrical in cross-section or dorsally compressed 47
Lemmas membranous (if rigid, laterally compressed) 49

47. Lemma ending in a 3-branched awn .... **ARISTIDA**
Lemma ending in a single undivided awn 48

48. Awn ± geniculate; spikelet base pointed, often long .... **STIPA**
Awn ± straight; spikelet base short and blunt .... **ERIACHNE**

49. Glumes similar in texture to and shorter than lemma; ligule hairy .... **SPOROBOLUS**
Glumes firmer in texture to and as long as or longer than lemma; ligule membranous 50

50. Spikelets falling whole .... ***POLYPOGON**
Spikelets fragmenting above glumes .... **AGROSTIS**

51. Spikelets morphologically or functionally unisexual, with male and female spikelets in different plants, different parts of plant or of same inflorescence 52
Spikelets bisexual, or with male or sterile and bisexual spikelets mixed in same inflorescence 57

52. Upper lemma membranous, thinner than glumes .... **CHIONACHNE**
Upper lemma hardened, thicker than glumes 53

53. Plants with male and female spikelets on same plant 54
Plants with male and female spikelets on different plants 55

54. Inflorescence a simple raceme, with 1-2 female spikelets and upper spikelets male .... **THUAREA**
Inflorescence a spiciform panicle with female spikelets in racemes below and male spikelets solitary above .... **HYGROCHLOA**

55. Inflorescence without appendages .... **PSEUDOCHAETOCHLOA**
Inflorescence with bract-like appendages 56

56. Female inflorescences with long spines; male inflorescences with short spines; inhabits coastal dunes .... **SPINIFEX**
Female inflorescences with broad appendages but no spines; inhabits desert sand dunes .... **ZYGOCHLOA**

57. Spikelets fragmenting above glumes .... **ARUNDINELLA**
Spikelets falling entire 58

58. Spikelets usually paired, with one sessile and other pedicelled (occasionally both pedicelled), rarely solitary and all alike or in 3's with 2 sessile and 1 pedicelled; [1 sessile & 2 pedicelled in *Chrysopogon setifolius & Capillipedium*] 59
Spikelets solitary and all alike, rarely paired, but never completely sessile. 84

59. Spikelets solitary, on short pedicels .... **DIMERIA**
Spikelets paired or in 3's, with at least 1 pedicelled spikelet (sometimes reduced to a pedicel) 60

60. Spikelets similar in shape, size and sex, or if different pedicelled spikelet awned and sessile unawned; pedicels and raceme joints slender 61
Spikelets different in shape, size and sex or if similar pedicels and raceme joints thickened 64

61. Spikelets unequally pedicelled 62
Spikelets with at least one sessile 63

62. Spikelets awnless .... **IMPERATA**
Spikelets awned .... **PSEUDOPOGONATHERUM**

63. Sessile spikelets male; pedicelled spikelets female .... **GERMAINIA**
Sessile and pedicelled spikelets similar in sex .... **EULALIA**

64. Rachis joints and/or pedicels stout, with hollows into which spikelets are sunk or adjacent to 65
Rachis joints and pedicels slender, or if thickened upwards, cup-shaped at tip 70

65. Sessile spikelet awned 66
Sessile spikelet awnless 67

66. Pedicels compressed .... **SEHIMA**
Pedicels swollen .... **ISCHAEMUM**

67. Lower glume of sessile spikelet 2-toothed .... **ELIONURUS**
Lower glume of sessile spikelet not 2-toothed 68

68. Spikelets in opposite rows on spike .... **OPHIUROS**
Spikelets on one side of spike 69

69. Lower floret of sessile spikelet male .... **ROTTBOELLIA**
Lower floret of sessile spikelet sterile .... **MNESITHEA**

70. Inflorescence without spathes and spatheoles 71
Inflorescence with spathes, spatheoles or spathe-like sheaths enclosing or subtending inflorescence 78

71. Rachis joints and pedicels with a translucent mid-line between thickened margins 72
Rachis joints and pedicels cylindrical in cross-section 73

72. Inflorescence a compound panicle .... **CAPILLIPEDIUM**
Inflorescence a simple panicle (a raceme of racemes) .... **BOTHRIOCHLOA**

73. Inflorescence of solitary, paired or subdigitate racemes 74
Inflorescence a panicle of racemes 75

74. Fertile spikelet ± cylindrical in cross-section; callus pungent .... **HETEROPOGON**
Fertile spikelet ± compressed; callus not pungent .... **DICHANTHIUM**

75. Spikelets dorsally compressed or ± cylindrical in cross-section 76
Spikelets laterally compressed 77

76. Peduncle with distinctive appendage; upper glume of sessile spikelet with long delicate awn twisted around lemma awn .... **CLAUSOSPICULA**
Peduncle without distinctive appendage; upper glume of sessile spikelet not awned .... **SORGHUM**

77. Racemes 1-2-jointed .... **CHRYSOPOGON**
Racemes 3-many jointed .... **VETIVERIA**

78. Fertile spikelets ± compressed 79
Fertile spikelets ± cylindrical in cross-section 82

79. Lower part of awn as wide as fertile lemma .... **SPATHIA**
Lower part of awn narrower than fertile lemma 80

80. Raceme bases cylindrical in cross-section .... ***ANDROPOGON**
Raceme bases flattened 81

81. Racemes paired; leaves aromatic .... **CYMBOPOGON**
Racemes solitary; leaves not aromatic .... **SCHIZACHYRIUM**

82. Fertile spikelets not within an involucre of male or barren spikelets .... **HYPARRHENIA**
Fertile spikelets within an involucre of male or barren spikelets 83

83. Fertile spikelets falling with involucre or whole raceme; callus blunt .... **ISEILEMA**

Fertile spikelets falling separately from involucre; callus pungent ..... **THEMEDA**

84. Inflorescence a spike or spike-like raceme; glumes as long as or longer than florets 85
Inflorescence otherwise or if a spike-like raceme lower glume shorter than florets 88

85. Inflorescence a spike ..... **THAUMASTOCHLOA**
Inflorescence a spike-like raceme 86

86. Spikelets with distinct bristles from confluent tubercles ..... **THYRIDOLEPIS**
Spikelets with indistinct bristles from single tubercles 87

87. Plant shortly rhizomatous ..... **NEURACHNE**
Plant stoloniferous ..... **PARANEURACHNE**

88. Spikelets with awns arising from between apical lobe of upper glume and/or lower lemma ..... ***MELINIS**
Spikelets awnless or with awn arising terminally 89

89. Spikelets in bunches subtended by bracts ..... **XEROCHLOA**
Spikelets not in bunches subtended by bracts 90

90. Inflorescence axis broad and flattened with spikelets on one or both sides ..... **URANTHOECIUM**
Inflorescence otherwise 91

91. Inflorescence branches ending in bristle-like appendages or spikelets subtended by bristles 92
Inflorescence branches ending in spikelets which are not subtended by bristles 98

92. Spikelets falling at maturity without any bristles or spines attached 93
Spikelets falling at maturity with bristles or spines attached 95

93. Spikelets subtended by bristles ..... **SETARIA**
Spikelets in racemes terminating in bristle-like appendages 94

94. Upper lemma covered with wrinkles, as long as or longer than upper glume ..... **PASPALIDIUM**
Upper lemma smooth, shorter than upper glume ..... **PSEUDORAPHIS**

95. Spikelets completely surrounded by a ring of spines or bristles 96
Spikelets not surrounded by spines or bristles 97

96. Bristles or spines joined to some degree at base, forming a burr ... **CENCHRUS**
Bristles free to base, fine and thread-like ... **PENNISETUM**

97. Lower glume up to 1/3 spikelet length ... **CHAMAERAPHIS**
Lower glume more than 1/3 spikelet length ... **PARACTAENUM**

98. Spikelet with a bead-like swelling at base ... **ERIOCHLOA**
Spikelet without a bead-like swelling at base ... 99

99. Fertile lemma thinly cartilaginous or membranous, with thin, flat and glabrous margins ... 100
Fertile lemma ± crustaceous (brittle), with margins which are firm, inrolled and glabrous or flat and ciliate ... 102

100. Upper glume shortly awned ... **ALLOTEROPSIS**
Upper glume obtuse to acuminate ... 101

101. Palea of upper floret not completely embraced by lemma ... **HYMENACHNE**
Palea of upper floret completely embraced by lemma ... **DIGITARIA**

102. Rachilla prominent between glumes and between florets; fertile florets usually with appendages at base ... **YAKIRRA**
Rachilla not prominent between glumes and between florets; fertile lemma without appendages at base ... 103

103. Inflorescence an open, compound, contracted or spike-like panicle ... 104
Inflorescence sparsely branched or digitate; spikelets on 1-sided spike-like racemes ... 106

104. Spikelets laterally compressed ... **WHITEOCHLOA**
Spikelets dorsally compressed to circular in cross-section ... 105

105. Inflorescence a spike-like panicle ... **SACCIOLEPIS**
Inflorescence a compound or racemose panicle ... **PANICUM**

106. Lower glume absent ... **PASPALUM**
Lower glume present ... 107

107. Upper lemma wrinkled with an apical rigid point ... ***UROCHLOA**
Upper lemma smooth without a rigid point ... 108

108. Lower glume awn longer than lower lemma; decumbent grass of shaded habitats ... **OPLISMENUS**
Lower glume awn shorter than lower lemma; of various habitats ... 109

109. Glumes and lower lemma scabrous ... **ECHINOCHLOA**
Glumes and lower lemma smooth ... **BRACHIARIA**

KEYS TO SPECIES

Accepted names are in **bold,** synonyms and misapplied names are in *italics.*

ACRACHNE

One species .... **A. racemosa** (26 WA QLD)
A. verticillata

AGROSTIS

One species ...... **A. avenacea** var. **avenacea** (29 NSW VIC TAS NT SA WA QLD)

ALLOTEROPSIS

Perennial; spikelets c. 6 mm long .... **A. semialata** (25 26 NSW WA QLD)
Annual; spikelets 3-4 mm long .... **A. cimicina** (25 26 QLD)

AMPHIPOGON

Lemmas uniformly hairy below lobes ....
.... **A. caricinus** var. **sericeus** (26 27 28 29 WA QLD)
Lemmas with two vertical bands of hairs in lower part ....
.... **A. caricinus** var. **caricinus** (26 27 28 29 NSW VIC SA WA QLD)

*ANDROPOGON

One species .... ***A. gayanus** (25 QLD)

ARISTIDA

1. Lateral awns less than 1/3 as long as median awn or absent .... **A. utilis** var. **utilis** (25 QLD)
A. streptachne
Lateral awns as long as median awn or more than 1/3 its length 2

2. Lemma with an articulation 3
Lemma without an articulation 9

3. Glumes inverse (lower glume longer than upper) ...... **A. polyclados** (25 WA QLD)
Glumes normal (not inverse) 4

4. Awns dissimilar, median thicker and usually recurved, laterals slender usually erect and up to 2 cm shorter 5
Awns ± similar and erect, laterals as long as median or shorter by 2-5 mm 6

5. Annual plant 35-50 cm tall; lemma 6-7.5 mm long .... **A. dominii** (25 WA QLD)
A. hirta auct.
Perennial plant 60-120 cm tall; lemma 8-12.5 mm long ....
.... **A. superpendens** (25 QLD)
A. hirta

6. Column 5.5-8 cm long, c. 1 mm thick .... **A. hygrometrica** (25 26 27 28 WA QLD)
Column usually less than 5 cm long, occasionally longer
(-6.5 cm) but then thinner (to 0.3 mm thick) 7

7. Culms ± wavy; lemma (including callus) 5-7 mm long,
brownish when mature .... **A. contorta** (26 27 28 29 NSW VIC SA WA QLD)
A. arenaria
Culms ± straight; lemma (including callus) 7-10 mm
long, purplish when mature 8

8. Leaf blades to 1.5 mm wide, involute ....
.... **A. holathera** var. **holathera** (25 26 27 28 29 NSW VIC SA WA QLD)
A. browniana var. *browniana*, *A. muelleri*
Leaf blades more than 3 mm wide, flattened ....
.... **A. holathera** var. **latifolia** (25 26 27)
A. browniana var. *latifolia*

9. Lemma involute, with a furrow on ventral surface of
caryopsis 10
Lemma convolute, without a furrow on ventral surface
of caryopsis 22

10. Lemma column present .... **A. perniciosa** (25 WA QLD)
Lemma column absent 11

11. Awns unequal, laterals 1/3-2/3 as long as median; culm
internodes pilose .... **A. queenslandica** var. **queenslandica** (25 QLD)
Awns ± equal or laterals more than 2/3 as long as median;
culm internodes not pilose 12

12. Margins of lemma furrow with one to several rows of
tubercles 13
Margins of lemma furrow smooth or lemma muricate
towards apex 17

13. Glumes inverse 14
Glumes subequal or normal 16

14. Glumes differing in length by less than 3 mm ....
.... **A. jerichoensis** var. **subspinulifera** (28 29 NSW SA QLD)
Glumes differing in length by more than 3 mm 15

15. Lemma with a pseudo-articulation; leaf blades curling up
at maturity .... **A. inaequiglumis** (26 28 29 WA QLD)
Lemma without a pseudo-articulation; leaf blades
straight or flexuous at maturity .... **A. pruinosa** (25 26 27 28 WA QLD)

16. Lemma 10-12 mm long .... **A. biglandulosa** (28 29 NSW SA QLD)
Lemma up to 9 mm long ....
.... **A. jerichoensis** var. **subspinulifera** (28 29 NSW SA QLD)

17. Lemma with a pseudo-articulation 18
Lemma without a pseudo-articulation 19

18. Glumes differing in length by more than 3 mm ....
.... **A. inaequiglumis** (26 28 29 WA QLD)
Glumes differing in length by less than 3 mm .... **A. ingrata** (25 27 WA QLD)

19. Lemma muricate towards apex 20
Lemma smooth 21

20. Annual or short lived perennial usually less than 30 cm tall; inflorescence a densely congested spike ....
.... **A. anthoxanthoides** (28 29 NSW SA WA QLD)
Perennials more than 50 cm tall; inflorescence a loosely arranged spike .... **A. exserta** (25 26 27 WA QLD)

21. Lemma margin distinctly protruding from ventral furrow .... **A. lazaridis** (25 WA QLD)
Lemma margin not protruding or if so, not distinctly ....
.... **A. calycina** var. **calycina** (25 27 NSW VIC WA QLD)
A. glumaris

22. Lemma with a twisted column (sometimes reduced to a 1/2 spiral) 23
Lemma without a column 26

23. Lower glume 3-7-nerved .... **A. schultzii** (25 WA QLD)
A. heterochaeta, A. intricata
Lower glume 1-nerved 24

24. Glumes differing in length by up to 2 mm ....
.... **A. latifolia** (25 26 27 28 29 NSW SA WA QLD)
Glumes differing in length by 3-4 mm 25

25. Inflorescence loose to open with branches naked at base ....
.... **A. macroclada** subsp. **macroclada** (25 QLD)
A. novaeguineae
Inflorescence ± spike-like with branches bearing spikelets from base .... **A. longicollis** (28 QLD)

26. Lemma shorter than or equal to upper glume 27
Lemma shorter than or subequal to lower glume 28

27. Upper glume more than 12 mm long .... **A. obscura**(28 29 NSW SA WA QLD)
Upper glume less than 12 mm long .... **A. longicollis** (28 QLD)

28. Lemma smooth or minutely scaberulous or scabrous only along margin .... **A. latzii** (29)
Lemma tuberculate to distinctly scabrous all over apically 29

29. Inflorescence loose and open .... **A. blakei** (29 QLD)
Inflorescence congested to spicate 30

30. Lemma tuberculate-spiny 31
Lemma distinctly scabrous 32

31. Glumes ± equal .... **A. nitidula** (28 29 NSW SA WA QLD)
Glumes unequal .... **A. arida** (28 29 SA)

32. Lemma 8.5-12 mm long; leaf blades conduplicate or flat .... **A. strigosa** (28 29 NSW SA WA QLD)
Lemma 5-8.5 mm long; leaf blades filiform .... **A. capillifolia** (29 SA WA)

ARUNDINELLA
Fertile lemma 3-awned .... **A. setosa** (25 27 QLD)
Fertile lemma 1-awned .... **A. nepalensis** (25 26 27 NSW WA QLD)

***ARUNDO**
One species .... ***A. donax** (29 NSW SA WA QLD)

ASTREBLA
1. Racemes slender, 2-3 mm wide .... **A. elymoides** (27 28 29 NSW WA QLD)
Racemes thicker, 5-13 mm wide 2

2. Lemma with 3 hooked awns .... **A. squarrosa** (25 26 27 NSW WA QLD)
Lemma with 1 straight awn 3

3. Glumes shorter than spikelets; spikelets densely overlapping .... **A. pectinata** (26 27 28 29 NSW SA WA QLD)
Glumes as long as spikelet; spikelets loosely overlapping .... **A. lappacea** (27 28 29 NSW SA WA QLD)
A. triticoides

AVENA
One species .... ***A. fatua** (28 29 NSW VIC TA29 SA WA QLD)

BAMBUSA
One species .... **B. arnhemica** (25)

BOTHRIOCHLOA

1. Pedicelled spikelets very different from sessile spikelets .... **B. decipiens** var. **cloncurrensis** (27 QLD)
Pedicelled spikelets ± similar to sessile spikelets 2

2. Racemes not subdigitate, on a main axis 4-14 cm long .... **B. bladhii** subsp. **bladhii** (25 26 27 28 29 NSW SA WA QLD)
B. intermedia
Racemes subdigitate, on a main axis less than 4 cm long 3

3. Leaf blades with a distinctive white marginal band;
spikelets not or very rarely pitted .... **B. ewartiana** (26 27 28 29 NSW SA WA QLD)
Leaf blades without a distinctive marginal band;
spikelets always pitted .... ***B. pertusa** (25 WA QLD)

BRACHIARIA

1. Inflorescence ± open or with spikelets in several untidy
rows; lower racemes sometimes branching 2
Inflorescence strictly regular and racemose with spikelets
in two regular rows; lower racemes never branching 6

2. Plants with robust ascending culms 2-6 m tall, with
rhizomes and stolons .... ***B. mutica** (25 NSW WA QLD)
Urochloa mutica
Plants with slender culms to 1 m tall, without rhizomes
and stolons 3

3. Spikelets c. 2 mm long .... **B. reptans** (25 26 WA QLD)
Urochloa reptans
Spikelets 3-4 mm long 4

4. Pedicels without long white bristly hairs .... **B. praetervisa** (27 28 29 NSW SA WA QLD)
Urochloa praetervisa
Pedicels with long white bristly hairs 5

5. Spikelets hairy, 3.5-4.6 mm long; rachilla pronounced
between glumes .... **B. pubigera** (25 27 NT WA QLD)
B. ramosa var. *grandiflora*, *Urochloa pubigera*
Spikelets glabrous,2.8-3.5 mm long; rachilla not
pronounced between glumes .... **B. windersii** (27 WA QLD)

6. Spikelets c. 3 mm long .... **B. ramosa** (25 QLD)
Urochloa ramosa
Spikelets more than 3 mm long 7

7. Lower glume 1/8-1/6 spikelet length 8
Lower glume 1/3-1/2 spikelet length 9

8. Spikelets hairy .... **B. gilesii** (25 28 29 NSW SA WA QLD)
Urochloa gilesii subsp. *gilesii*
Spikelets glabrous .... **B. notochthona** (28 29 NSW SA QLD)

9. Spikelets hairy 10
Spikelets glabrous 13

10. Spikelets with a subapical fringe of silky hairs 11
Spikelets evenly hairy or if with longer apical hairs these
not arranged in a fringe .... **B. piligera** (25 26 27 28 29 NSW SA WA QLD)
B. piligera var. *intercedens*, *Urochloa piligera*

11. Hairs of subapical fringe ± same length; lower lemma not
drawn out to an apical point .... **B. argentea** (25)
Urochloa argentea
Hairs of apical fringe of varying lengths; lower lemma
drawn out to an apical point 12

12. Leaf blades not velutinous ....
.... **B. holosericea** subsp. **holosericea** (25 26 27 28 WA QLD)
Urochloa holosericea subsp. *holosericea*
Leaf blades velutinous .... **B. holosericea** subsp. **velutina** (25 WA QLD)
Urochloa holosericea subsp. *velutina*
13. Spikelets more than 2 mm wide .... **B. atrisola** (26 QLD)
Urochloa atrisola
Spikelets less than 2 mm wide 14

14. Spikelets reddish; leaf margins serrate .... **B. polyphylla** (25 QLD)
Urochloa polyphylla
Spikelets green to yellow 15

15. Annual; spikelets 3.5-4 mm long; spikelets
lanceolate-oblong .... **B. subquadripara** (25 26 27 28 29 NSW SA WA QLD)
B. miliiformis, *Urochloa subquadripara*
Stoloniferous perennial; spikelets 2.5-3 mm long,
obovoid-ovoid .... **B. distachya** (25 QLD)

BRACHYACHNE

1. Plant prostrate; inflorescence spikes and leaf blades up
to 1 cm long .... **B. prostrata** (26 28 WA QLD)
Plant erect or stoloniferous; inflorescence spikes and
leaf blades more than 2 cm long 2

2. Lemma and palea with a subapical tuft of hairs ... **B. ciliaris** (28 29 NSW SA QLD)
Lemma and palea hairy to some degree but without a
subapical tuft 3

3. Glumes 3.5-4.5 mm long; leaf sheath auricles
bearded .... **B. convergens** (25 26 27 28 29 NSW WA QLD)
Glumes 2-3 mm long; leaf sheath auricles glabrous 4

4. Grain laterally compressed; glumes acute .... **B. ambigua** (25 WA)
Grain ellipsoid; glumes sub-obtuse .... **B. tenella** (25 26 27 NSW WA QLD)

BROMUS

One species .... ***B. diandrus** (29 NSW VIC TAS SA WA QLD)
B. gussonii

CAPILLIPEDIUM

Racemes 1-2-jointed .... **C. parviflorum** (25 NSW QLD)
Racemes 3-8-jointed .... **C. spicigerum** (25 NSW QLD)

CENCHRUS

1. Spines connate for more than 1/3 of distance above base 2
Spines connate to 1/3 of distance above base 4

2. Burr of several whorls of flattened spines without being surrounded by smaller finer bristles .... ***C. longispinus** (29 NSW VIC SA WA QLD)
C. pauciflorus var. *longispinus*, *C. tribuloides* auct.
Burr of 1 whorl of united flattened spines surrounded by many smaller finer bristles 3

3. Outer bristles and inner spines ± equal in length .... ***C. brownii** (25 QLD)
Outer bristles ± 1/2 length of inner spines .... ***C. echinatus** (25 26 27 28 29 NSW WA QLD)

4. Spines retrorsely barbed .... ***C. biflorus** (26 27 WA QLD)
C. barbatus
Spines antrorsely barbed 5

5. Spines not extending beyond burr .... ***C. setiger** (25 26 28 NSW WA QLD)
Spines or a single spine extending beyond burr 6

6. Spikelets c. 8 mm long 7
Spikelets c. 5 mm long 8

7. Burr with a single elongated bristle and a few very short basal bristles .... **C. elymoides** var. **brevisetosus** (25 26 WA QLD)
Burr with many bristles as long as or extending beyond burr, one of them at least three times longer than others .... **C. elymoides** var. **elymoides** (25 26 WA QLD)

8. Bristles joined together only at base .... ***C. ciliaris** (25 26 27 28 29 NSW VIC SA WA QLD)
Bristles joined together above base for 1-3 mm .... ***C. pennisetiformis** (27 28 29 NSW WA QLD)

CHAMAERAPHIS

One species .... **C. hordeacea** (25 QLD)

CHIONACHNE

Perennial; male (upper) portion of inflorescence as long
as female (lower) portion .... **C. cyathopoda** (26 WA QLD)
Annual; male portion of inflorescence much shorter than
female portion .... **C. hubbardiana** (25 26 27 WA QLD)

CHLORIS

1. Lemma of lowest floret with a short apical hook-like
bristle .... ***C. pilosa** (25)
Lemma of lowest floret awned 2

2. Spikelet blunt at apex 3
Spikelet narrowed to pointed at apex 5

3. Lowest floret lemma hairy on lower margin 4
Lowest floret lemma glabrous on lower margin ....
.... ***C. inflata** (25 27 28 WA QLD) *C.*
C. barbata auct.

4. Awns much longer than spikelets....... ***C. virgata** (28 29 NSW VIC SA WA QLD)
Awns shorter to slightly longer than spikelets ....
.... ***C. gayana** (25 NSW VIC SA WA QLD)

5. Lemma 1-awned 6
Lemma 3-awned 7

6. Tufted annual; spikes 4-7 cm long ...... **C. pectinata** (27 28 29 NSW SA WA QLD)
Stoloniferous or decumbent perennial; spikes 8-20 cm
long .... **C. divaricata** (25 NSW QLD)
C. divaricata var. *cynodontoides*

7. Lemma awns subequal... **C. lobata** (25 27 WA QLD)
Lemma awns unequal .... **C. pumilio** (25 WA QLD)
C. ruderalis

CHRYSOPOGON

1. Awn to 7 mm long or absent 2
Awn to 17 mm long 3

2. Tufted plant with setaceous leaf blades .... **C. setifolius** (25 QLD)
Creeping plant with flat or folded leaf blades .... **C. aciculatus** (25 QLD)

3. Callus 4-6 mm long .... **C. pallidus** (25 27 28 WA QLD)
Callus 1.5-3.5 mm long 4

4. Leaf-blades 1-2 cm wide .... **C. latifolius** (25 WA)
Leaf-blades much less than 1 cm wide ....
.... **C. fallax** (25 26 27 28 29 NSW SA WA QLD)

CLAUSOSPICULA

One species .... **C. extensa** (25)

COELACHNE

One species .... **C. pulchella** (25 QLD)

CYMBOPOGON

1. Racemes only slightly hairy, hairs less than 3 mm long .... **C. refractus** (25 NSW VIC QLD)
   Racemes distinctly hairy, hairs 4-7 mm long 2

2. Longer callus hairs up to 1.3 mm long 3
   Longer callus hairs 3.5-5 mm long 5

3. Leaf blades up to 3 mm wide, filiform to very narrow; culms delicate and drooping .... **C. dependens** (25 WA)
   Leaf blades more than 4 mm wide; culms robust and erect 4

4. Plant 1.5-2.5 m tall with 7-11-noded inflorescences; lower glume of sessile spikelet not more than 4.5mm long .... **C. procerus** (25 26 WA)
   C. exaltatus
   Plant usually less than 1.5 m tall, with 4-8-noded inflorescences; lower glume of sessile spikelet 5.5-7 mm long .... **C. ambiguus** (25 26 27 28 29 NSW SA WA QLD)
   C. exaltatus auct.

5. Leaf sheaths to 6 mm wide, rolling back at maturity .... **C. bombycinus** (25 26 27 28 WA QLD)
   Leaf sheaths 2-3 mm wide, not rolling back at maturity .... **C. obtectus** (26 27 28 29 NSW VIC SA WA QLD)

CYNODON

1. Spikes flexuous, 5-8, 6-12 cm long .... **C. radiatus** (25)
   C. arcuatus
   Spikes not flexuous, 3-6, 1-6 cm long 2

2. Plants with rhizomes and stolons .... **C. dactylon** var. **dactylon** (25 28 29 NSW VIC TAS SA WA QLD)
   Plants only with stolons .... ***C. lemfuensis** var. **lemfuensis** (29 QLD)

DACTYLOCTENIUM

Spikes up to 1.5 cm long; spikelets c. 5 mm long .... **D. radulans** (25 26 27 28 29 NSW VIC TAS SA WA QLD)
Spikes 1-5 cm long; spikelets 2.5-3 mm long...... ***D. aegyptium** (25 27 WA QLD)

DICHANTHIUM

1. Lower glume of sessile spikelet with a sub-apical arch of long cilia 2
Lower glume of sessile spikelet without a ciliate sub-apical arch 4

2. Lower glume of pedicelled spikelet obovate with sub-apical arch of conspicuous, cilia erect from surface; robust annuals .... **D. sericeum** subsp. **polystachyum** (25 26 27 28 WA QLD)
D. superciliatum, D. tenuiculum
Lower glume of pedicelled spikelet linear to narrowly ovate, cilia not erect from surface; annuals or perennials 3

3. Spikelets 4.5 x 1-1.4 mm; lower glume 9-10-nerved; raceme usually more than 4 cm long; perennials .... **D. sericeum** subsp. **sericeum** (25 26 28 29 NSW VIC TAS SA WA QLD)
D. affine
Spikelets to 4 x 1 mm; lower glume 5-7-nerved; racemes less than 4 cm long; annuals .... **D. sericeum** subsp. **humilius** (28 29 NSW SA WA QLD)

4. Lower glume of sessile spikelet ± obovate .... ***D. aristatum** (25 WA QLD)
Lower glume of sessile spikelet ± oblong 5

5. Spikelets at least 4.5 mm long, acute; pedicelled spikelet bisexual .... **D. fecundum** (25 26 27 28 WA QLD)
Spikelets to 4 mm long, obtuse to truncate; pedicelled spikelet male or sterile .... ***D. annulatum** (25 26 WA QLD)

DIGITARIA

1. Racemes long and rigid, usually devoid of spikelets at base 2
Racemes not long and rigid, usually bearing spikelets to base 6

2. Spikelets 3.75-6 mm long .... **D. coenicola** (28 29 NSW VIC SA WA QLD)
Spikelets up to 3 mm long (excluding protruding hairs if present) 3

3. Spikelets glabrous .... **D. nematostachya** (25 26 27 NSW WA QLD)
Spikelets woolly-hairy 4

4. Lower glume absent or to 0.15 mm long .... **D. papposa** (25 26 WA QLD)
Lower glume more than 0.3 mm long 5

5. Lower lemma without marginal stiff bristles .... **D. ammophila** (29 NSW VIC SA WA QLD)
Lower lemma with marginal stiff bristles .... **D. hystrichoides**(28 29 NSW QLD)

6. Spikelets with long hairs exceeding spikelet 7
Spikelets glabrous or hairy, if latter hairs not exceeding spikelet 9

7. Annual; inflorescence of 1 raceme .... **D. gibbosa** (25 26 WA QLD)
Perennials; inflorescence of more than 1 raceme 8

8. Lower glume c. 1/4 spikelet length, separated to some degree from upper glume .... **D. brownii** (25 26 27 28 29 NSW VIC SA WA QLD)
D. brownii var. *monostachya*
Lower glume absent or a minute hyaline rim, adjacent to upper glume .... **D. leucostachya** (25 NSW QLD)

9. Racemes digitate or subdigitate or inflorescence with a common axis usually shorter than racemes 10
Racemes usually single on a common axis usually as long as or longer than racemes 20

10. Lower glume absent.................................. ***D. violascens** (25 NSW SA WA QLD)
Lower glume present 11

11. Inflorescence with 2-3 racemes 12
Inflorescence usually with 4 or more racemes 17

12. Spikelets arranged in 3's 13
Spikelets arranged in pairs 14

13. Upper lemma brown to black at maturity .... ***D. violascens** (25 NSW SA WA QLD)
Upper lemma pale to yellow at maturity .... **D. longiflora** (25 28 29 NSW WA QLD)
D. curvipes, D. eriolepis, D. propinqua, D. speciosa

14. Pedicelled spikelets with orange rigid bristles .... **D. ctenantha** (25 26 27 28 29 SA WA QLD)
D. robusta
Pedicelled spikelets without bristles 15

15. Tufted and erect; lower glume if present, truncate .... **D. stenostachya** (25 26)
Creeping; lower glume if present, acute 16

16. Mat-forming perennials with cataphylls .... **D. heterantha** (25 QLD)
Loose stoloniferous annuals without cataphylls ....
.... *__D. ciliaris__ (25 NSW VIC SA WA QLD)
D. adscendens

17. Spikelets less than 2 mm long .... *__D. violascens__ (25 NSW SA WA QLD)
Spikelets more than 2 mm long 18

18. Spikelets of each spikelet pair different or similar and
bristled .... **D. bicornis** (25 26 WA QLD)
D. queenslandica
Spikelets of each pair similar and not bristled 19

19. Upper glume less than 1/4 spikelet length .... **D. setigera** (28 29 QLD)
D. pruriens
Upper glume at least 1/2 spikelet length ....
.... *__D. ciliaris__ (25 NSW VIC SA WA QLD)
D. adscendens

20. Upper glume less than 1/2 spikelet length .... **D. breviglumis** (25 27 NSW QLD)
D. diminuta, D. fumida
Upper glume more than 1/2 spikelet length .... **D. oraria** (25 QLD)

DIMERIA

1. Perennial more than 50 cm tall .... **D. chloridiformis** (25 QLD)
D. ciliata
Annuals up to 40 cm tall 2

2. Spikelets c. 5 mm long .... **D. acinaciformis** (25 QLD)
Spikelets c. 2.5 mm long .... **D. ornithopoda** (25 WA QLD)

DIPLACHNE

Spikelets 7-9 mm long, 5-9 flowered ....
.... **D. parviflora** (25 28 29 NSW VIC SA WA QLD)
Spikelets 10-15 mm long, 10-12-flowered ....
.... **D. fusca** (28 29 NSW VIC SA WA QLD)
Leptochloa fusca, L. muelleri, D. muelleri, D. reptatrix

ECHINOCHLOA

1. Ligule a fringe of long stiff hairs; plants perennial .... **E. praestans** (25)
Ligule absent or with cilia to 1.5 mm long; plants annual 2

2. Inflorescence very compact and densely crowded;
spikelets at maturity very turgid and subglobose ....
.... **E. turneriana** (27 28 NSW SA QLD)
Inflorescence not or less compact and densely crowded;
spikelets at maturity less turgid and subglobose 3

3. Upper glume not or scarcely awned ....
.... ***E. colona** (25 26 28 NSW VIC SA WA QLD)
Upper glume with awn to 7 mm long 4

4. Mature grain less than 2.5 mm long .... **E. elliptica** (25 QLD)
Mature grain 2.5-3.5 mm long 5

5. Upper floret 5-6.5 mm long; anthers 1.5-2.1 mm long ....
.... **E. kimberleyensis** (26 WA QLD)
Upper floret 4.5-5 mm long; anthers 2.5-2.8 mm long .... **E. macrandra** (25 WA)

ECTROSIA

1. Spikelets 14-30 mm long (excluding awns); lowest lemma 4-7 mm long 2
Spikelets 2-11(-14) mm long; lowest lemma 1.5-4 mm long 3

2. Spikelets appressed to inflorescence branches .... **E. danesii** (25 WA QLD)
E. appressa
Spikelets laxly dispersed .... **E. laxa** (25 QLD)

3. Lemmas distinctly scabrid all over .... **E. scabrida** (27 28 WA QLD)
Lemmas smooth or slightly scabrous 4

4. Spikelets 2-4 mm wide .... **E. confusa** (25 QLD)
Spikelets 0.5-1.5 mm wide 5

5. Florets 8-25, all similar, mainly bisexual; awns 0.5-1.5 mm long .... **E. lasioclada** (26 28 QLD)
E. eragrostoides
Florets 2-9, lower bisexual or male, upper sterile; awns up to 12 mm long 6

6. Spikelets 6-10 mm long (excluding awns) 7
Spikelets 2-5 mm long 8

7. Perennial .... **E. schultzii** var. **schultzii** (25 26 27 28 WA QLD)
Annual .... **E. schultzii** var. **annua** (25 QLD)

8. Spikelets 2-3 mm long; inflorescence open .... **E. agrostoides** (25 QLD)
Spikelets 3-7 mm long; inflorescence ± congested ....
.... **E. leporina** (25 26 27 WA QLD)
E. leporina var. *longiglumis, E. leporina* var. *micrantha, E. leporina* var. *pauciflora, E. leporina* var. *spadicea*

***ELEUSINE**

One species .... ***E. indica** (25 NSW VIC SA WA QLD)

ELIONURUS

One species .... **E. citreus** (25 QLD)

ELYTROPHORUS

One species .... **E. spicatus** (25 26 27 28 NSW VIC SA WA QLD)

ENNEAPOGON

1. Inflorescence 0.8-3 cm long, compactly capitate 2
Inflorescence 3-14 cm long, spiciform or loosely contracted 5

2. Body of basal lemma similar in length and width .... **E. caerulescens** var. **caerulescens** (29 SA WA)
Body of basal lemma longer than wide 3

3. Palea with a glabrous patch at apex; outer 2 awns 2-nerved at base .... **E. oblongus** (26 27 28 29 SA WA QLD)
Palea uniformly and evenly pubescent; all awns 1-nerved 4

4. Awns distinctly longer than body of lemma .... **E. clelandii** (28 29 SA WA QLD)
Awns shorter to slightly longer than body of lemma .... **E. lindleyanus** (27 29 WA QLD)
E. pallidus var. *breviseta*

5. Basal palea cartilaginous, glabrous on body 6
Basal palea membranous, hairy on body 7

6. Basal lemma as wide as long; second floret well developed .... **E. decipiens** (25 26 WA QLD)
Basal lemma longer than wide; second floret much smaller than first .... **E. eremophilus** (27 28 29 QLD)

7. Culms disarticulating at nodes .... **E. cylindricus** (27 28 29 NSW SA WA QLD)
Culms not disarticulating at nodes 8

8. Body of basal lemma obscured by dorsal hairs which exceed base of awns 9
Body of basal lemma partly exposed as dorsal hairs do not or scarcely reach base of awns 11

9. Florets usually 2, 1 bisexual; upper florets crowded distally .... **E. polyphyllus** (25 26 27 28 29 NSW SA WA QLD)
Floret usually 3-5, 2-3 bisexual; upper florets not crowded 10

10. Glumes usually more than 13-nerved; panicle often loosely contracted .... **E. avenaceus** (25 27 28 29 NSW SA WA QLD)
Glumes usually 5-13-nerved; panicle spiciform .... **E. intermedius** (28 29 NSW SA WA QLD)

11. Body of basal lemma cartilaginous to indurated, nerves scarcely ribbed 12
Body of basal lemma membranous, nerves thickened .. **E. robustissimus** (27 QLD)

12. Body of basal palea pubescent in lower 1/2-2/3, glabrous above .... **E. purpurascens** (25 26 27 28 29 WA QLD)
E. glaber, E. planifolius
Body of basal palea entirely pubescent .... **E. pallidus** (25 26 27 28 29 NSW WA QLD)

ENTEROPOGON

1. Leaves mostly basal .... **E. acicularis** (26 28 29 NSW SA WA QLD)
Chloris acicularis, C. moorei
Leaves produced uniformly up culm 2

2. Lemma of fertile floret more than 5 mm long; spikelets loosely over-lapping .... **E. ramosus** (25 28 29 NSW VIC SA WA QLD)
Chloris acicularis var. *queenslandiae*, *E. acicularis Form A*
Lemma of fertile floret up to 5 mm long; spikelets tightly overlapping 3

3. Lemma of fertile floret 3-3.5 mm long; spikes flaccid .... **E. minutus** (25 QLD)
Lemma of fertile floret 3.5-5 mm long; spikes stiff .. **E. dolichostachyus** (25 QLD)

ERAGROSTIS

1. Leaf-blade with tuberculate glands on margins 2
Leaf-blades without marginal glands 3

2. Spikelets 2-4 mm wide .... ***E. cilianensis** (25 28 29 NSW VIC TAS SA WA QLD)
Spikelets less than 2 mm wide .... ***E. minor** (28 NSW SA QLD)
E. pooides

3. Spikelets terete or ± biconvex 4
Spikelets ± laterally compressed 10

4. Lemma with lateral nerves closer to margin than to mid-nerve 5
Lemma with lateral nerves mid-way between margin and mid-nerve or sometimes closer to latter 6

5. Spikelets c. 0.5 mm wide .... **E.** sp. Latz 2269 (28)
Spikelets 0.75-1 mm wide .... **E. lacunaria** (29 NSW VIC SA QLD)

6. Annuals 7
Perennials 8

7. Lemma 1.75-2.5 mm long; spikelet 1-1.5 mm wide .... **E. dielsii** (28 29 NSW VIC SA WA QLD)
Lemma 1.5-1.6 mm long; spikelet 0.75-1 mm wide .... **E. pergracilis** (29 NSW SA WA QLD)

8. Spikelets rigid; inflorescence ± contracted .... **E.** sp. Brass 1846 (28 NSW QLD)
Spikelets flexuous; inflorescence ± open and loose 9

9. Culm with a thick and woolly butt .... **E. desertorum** (27 28 29 NSW WA QLD)
Culm not much thickened and only slightly woolly at base .... **E. falcata** (28 29 SA WA QLD)

10. Palea up to 1/2 lemma length ...... **E. speciosa** (25 26 27 28 29 NSW SA WA QLD)
Palea more than 1/2 lemma length 11

11. Perennials with rhizomes or conspicuously swollen butts 12
Annuals or slender perennials, scarcely thickened at base 17

12. Rhizome and butt woolly 13
Rhizome and butt glabrous or sparsely pubescent (rarely woolly) 16

13. Spikelets woolly-hairy .... **E. laniflora** (28 29 NSW SA WA QLD)
Spikelets glabrous 14

14. Spikelets c. 1 mm wide .... **E. desertorum** (27 28 29 NSW WA QLD)
Spikelets at least 2 mm wide 15

15. Spikelets ± clustered round inflorescence axis; pedicels less than 1 mm long .... **E. eriopoda** (26 27 28 29 NSW SA WA QLD)
Spikelets in an open inflorescence; pedicels more than 1 mm long .... **E.** sp. Latz 2015 (26 27 28 QLD)

16. Rhizome knotty; leaf-blades flat and recurved .... **E. xerophila** (27 28 29 NSW SA WA QLD)
Rhizome not knotty; leaf-blades inrolled and stiffly erect .... **E. setifolia** (27 28 29 NSW VIC SA WA QLD)

17. Spikelets to 1 mm wide 18
Spikelets wider than 1 mm 22

18. Spikelets up to 2 mm long, 2-5-flowered 19
Spikelets more than 2 mm long, 4-9-flowered 20

19. Slender perennial; inflorescence with ± congested branches .... **E. kennedyae** (25 28 29 NSW SA WA QLD)
Annual; inflorescence ± open .... **E. tenella** (25 WA QLD)
E. amabilis

20. Spikelets more than 4 mm long .... **E. leptocarpa** (28 29 NSW SA WA QLD)
Spikelets 2-3 mm long 21

21. Inflorescence ± spiciform .... **E. confertiflora** (25 27 28 29 SA QLD)
Inflorescence an open panicle ....
.... **E. tenellula** (25 26 27 28 29 NSW VIC SA WA QLD)*E. japonica* auct.

22. Lateral nerve of lemma distinct 23
Lateral nerve of lemma indistinct 40

23. Lemma 2.5-3.5 mm long 24
Lemma less than 2.5 mm long 26

24. Annual .... **E.** sp. Latz 6053 (25)
Perennials 25

25. Pedicels less than 0.5 mm long; inhabits coastal dunes ....
.... **E. interrupta** (25 NSW WA QLD)
Pedicels more than 0.5 mm long; inhabits sclerophyll
woodlands and forests .... **E. pubescens** (25 NSW WA QLD)

26. Branches of inflorescence with glandular spots or rings ....
.... ***E. barrelieri** (28 29 NSW SA)
Branches of inflorescence without glands 27

27. Inflorescence comprising more than half height of plant ....
.... **E. cumingii** (25 27 28 29 WA QLD)
E. bleeseri, E. distans
Inflorescence comprising less than half height of plant 28

28. Spikelets on pedicels 0.1-0.5 mm long 29
Spikelets on pedicels more than 0.5 mm long 36

29. Spikelets arranged in an open inflorescence 30
Spikelets bunched in clusters 31

30. Spikelets ± 2 mm wide .... **E. sterilis** (29 QLD)
Spikelets up to 1.5 mm wide .... **E. stenostachya** (25 QLD)

31. Rachilla disarticulating between florets 32
Rachilla not disarticulating between florets 35

32. Palea prominently ciliate .... **E. basedowii** (28 29 NSW SA WA QLD)
Palea glabrous or minutely ciliate 33

33. Spikelets 1.5-2 mm wide, 6-14-flowered ....
.... **E. elongata** (25 26 27 28 29 NSW VIC SA WA QLD)
E. contingua, E. diandra
Spikelets 2.2-3 mm wide, 16-36-flowered 34

34. Mature spikelet at least 12 mm long .... **E. concinna** (25 28 29 QLD)
E. bella
Mature spikelet less than 12 mm long .... **E. sororia** (25 NSW QLD)

35. Spikelet ± 2 mm wide .... **E. schultzii** (25 QLD)
Spikelet ± 3 mm wide .... **E. tenax** (25 26 27 WA QLD)

36. Spikelets ± appressed to primary branches .. **E. spartinoides** (25 26 27 NSW QLD)
Spikelets not appressed to primary branches 37

37. Palea deciduous with lemmas .... **E.** sp. Dunlop 3071 (25)
Palea not deciduous with lemmas 38

38. Spikelets 0.5-1.5 mm wide .... **E.** sp. Blake 12593 (27 QLD)
Spikelets more than 1.5 mm wide 39

39. Leaf-blades to 6 mm wide, curling up at maturity .... **E. rigidiuscula** (25)
Leaf-blades much narrower, not curling up at maturity ....
.... **E. brownii** (25 NSW VIC TAS SA WA QLD)

40. Robust and cane-like with culms much branched ....
.... **E. australasica** (29 NSW VIC SA WA QLD)
Not robust and cane-like nor with culms branched 41

41. Annual .... ***E. pilosa** (25 NSW VIC WA QLD)
Perennials 42

42. Lower inflorescence branches whorled ....
.... **E. parviflora** (25 26 28 29 NSW VIC SA WA QLD)
Lower inflorescence branches not whorled 43

43. Basal leaf-sheaths compressed; inflorescence branches
ciliate in their axils .... ***E. tenuifolia** (28 NSW TAS QLD)
Basal leaf-sheaths not compressed; inflorescence branches
not ciliate in their axils .... ***E. curvula** (29 NSW VIC TAS SA WA QLD)
E. chloromelas

ERIACHNE

1. Lemma distinctly awned 2
Lemma awnless or mucronate 26

2. Awn at least twice spikelet length 3
Awn shorter than, as long as or slightly longer than
spikelet length 15

3. Palea awns separate, almost as long as lemma awns .... **E. triseta** (25 QLD)
Palea awns absent or fused for some distance of their
length and much shorter than lemma awns 4

4. Inflorescence ± loose 5
Inflorescence dense 10

5. Palea without awns 6
Palea with awns, fused somewhere along their length 8

6. Spikelets (without awns) less than 5 mm long 7
Spikelets 7-8 mm long .... **E. burkittii** (25 QLD)
E. burkittii var. *hirsutissima, E. laidlawii*

7. Spikelets c. 2 mm long .... **E.** sp. Dunlop 4849 (25)
Spikelets 3-4 mm long .... **E. agrostidea** (25 QLD)

8. Palea awns fused along most of their length .... **E. rara** (25 QLD)
Palea awns fused only at base 9

9. Culms, leaves and glumes hairy .... **E. stipacea** var. **hirsuta** (25 QLD)
Culms, leaves and glumes glabrous .... **E. stipacea** var. **stipacea** (25 QLD)

10. Annual; palea awns fused only at base .... **E. armitii** (25 26 27 28 WA QLD)
Perennials; palea awns fused for most of their length 11

11. Glumes more than 8 mm long 12
Glumes 4-5 mm long 14

12. Lemma obtuse without lateral grooves apically; culm in
ternodes hairy to some degree .... **E. squarrosa** (25 26 WA QLD)
Lemma acute, with lateral grooves apically; culm
internodes glabrous 13

13. Lemma hairy all over; palea c. 9 mm long .... **E. schultziana** (25)
Lemma hairy in lower half; palea c. 7 mm long .... **E. sulcata** (25 26 WA)

14. Nodes glabrous .... **E. glauca** var. **glauca** (25 26 WA QLD)
Nodes bearded .... **E. glauca** var. **barbinodis** (26 WA QLD)

15. Spikelets (without awns) longer than 6 mm 16
Spikelets (without awns) shorter than 5 mm 21

16. Annuals 17
Perennials 18

17. Glumes glabrous; leaf-blades filiform .... **E.** sp. Lazarides 7926 (25)
Glumes with tubercle-based hairs; leaf-blades flat ....
.... **E. aristidea** (26 27 28 29 NSW SA WA QLD)
E. aristidea var. *minor, E. gardneri*

18. Awns strongly recurved in mature spikelets .... **E. festucacea** (25 26 WA)
Awns straight in mature spikelets 19

19. Lemma glabrous .... **E. obtusa** (25 26 27 28 WA QLD)
Lemma pilosa 20

20. Lemma pilose on margins; awn shorter than lemma;
leaf-blades filiform .... **E. avenacea** (25 26 WA)
E. setacea
Lemma pilose all over back; awn as long as lemma;
leaf-blades flat to involute .... **E. triodioides** (25 WA QLD)

21. Perennials .... **E. pallescens** (25 NSW QLD)
E. muelleri, E. yarrabensis
Annuals 22

22. Inflorescence very open; leaf-blades usually flat; spikelets
(excluding awns) up to 3.5 mm long 23
Inflorescence contracted to some degree; leaf-blades
usually involute; spikelets 3.5 mm or more long 24

23. Spikelets 3-3.5 mm long; awns as long as lemma ....
.... **E. ciliata** (25 26 27 28 WA QLD)
Spikelets c. 2.5 mm long; awns shorter than lemma ....
.... **E.** sp. Simon 3007 (25 26 WA QLD)

24. Inflorescence in tight clusters .... **E.** sp. Dunlop 4563 (25)
Inflorescence loosely contracted 25

25. Lemma (excluding awn) 2-3 mm long, with awn longer
than lemma .... **E. filiformis** (25 WA QLD)
Lemma 3.25-4 mm long, with awn shorter than lemma .... **E. humilis** (25 QLD)

26. Spikelets less than 2 mm long 27
Spikelets at least 3 mm long 30

27. Inflorescence an open panicle .... **E. capillaris** (25)
Inflorescence a spicate panicle 28

28. Lemma not ciliate on margins .... **E. fastigiata** (26 WA)
Lemma ciliate on margins 29

29. Inflorescence densely spicate, up to 3.5 cm long when
mature .... **E. pulchella** (26 27 28 29 NSW SA WA QLD)
E. isingiana
Inflorescence loosely spicate, more than 3.5 cm long
when mature .... **E. dominii** (25 27 WA QLD)

30. Lemma more than 10 mm long 31
Lemma less than 10 mm long 32

31. Lemma c. 10.5 mm long ... **E. bleeseri** (25)
Lemma 11.5-14 mm long ... **E. nervosa** (25 26 27 28 QLD)

32. Annuals ... 33
Perennials ... 34

33. Spikelets c. 7 mm long ... **E. melicacea** (25 26 27 28 WA QLD)
Spikelets c. 5 mm long ... **E.** sp. Lazarides 7918 (25)

34. Inflorescence reduced to 1-2 spikelets; culm internodes woolly and completely covered by leaf sheaths ... **E. scleranthoides** (29)
Inflorescence of few to numerous spikelets; culm internodes not as above ... 35

35. Butt distinctly thickened and very woolly ... 36
Butt, if thickened and/or woolly only slightly so ... 37

36. Inflorescence open ... **E. helmsii** (28 29 NSW SA WA QLD)
Inflorescence densely spicate ... **E. basedowii** (25 26)

37. Lemma 7-9 mm long ... **E. ovata** (27 28 29 SA WA QLD)
E. benthamii, E. flaccida, E. ovata var. *villosa*
Lemma less than 5 mm long ... 38

38. Lemma with an acute apex ... **E. obtusa** (25 26 27 28 WA QLD)
E. obtusa var. *major*
Lemma with a mucronate apex ... 39

39. Culms 4-6-noded; leaf-blades to 4 cm long ... **E. mucronata** Typical Form (28 29 NSW SA WA QLD)
Culms more than 6-noded; leaf-blades less than 1.5 cm long ... **E. mucronata** Desert Form (28 29 QLD)
E. mucronata var. *desertorum*

ERIOCHLOA

1. Spikelets with apices drawn out into bristles ... 2
Spikelets with apices acute to acuminate ... 4

2. Spikelets c. 8 mm long (including bristle) ... **E. longiflora** (29 NSW SA QLD)
Spikelets less than 8 mm long ... 3

3. Spikelets 6-8 mm long; annual ... **E. australiensis** (29 NSW SA WA QLD)
Spikelets 4-6 mm long; usually perennial ... **E. pseudoacrotricha** (25 28 29 NSW VIC SA WA QLD)

4. Spikelets lightly overlapping on racemes, 3.7-5 mm long ... **E. crebra** (25 NSW QLD)
Spikelets ± loose on racemes, 3-3.7 mm long ... 5

5. Slender perennial .... **E. procera** (25 NSW WA QLD)
Decumbent annual .... **E. decumbens** (25 QLD)

EULALIA

1. Tall robust plant to 2 m tall with a fulvous, fibrous base ....
.... **E. mackinlayi** (25 WA QLD)
Plants less than 1.5 m tall; base not fulvous nor fibrous 2

2. Rhizomatous, strongly tufted perennial ....
.... **E. aurea** (25 26 27 28 29 NSW VIC SA WA QLD)
E. fulva
Decumbent to weakly tufted annual .... **E. annua** (25 QLD)

GERMAINIA

Lower glume of sessile spikelet 3-4.5 mm long; awn up to
2.5 cm long .... **G. truncatiglumis** (25 26 WA)
Sclerandrium truncatiglume
Lower glume of sessile spikelet more than 6 mm long;
awn more than 2.5 cm long .... **G. grandiflora** (25 QLD)
Sclerandrium grandiflorum

HETERACHNE

Spikelets 4-10 mm long .... **H. abortiva** (25 26 WA QLD)
Spikelets less than 4 mm long .... **H. gulliveri** (25 WA QLD)
H. gulliveri var. *major*

HETEROPOGON

Plant usually greater than 1 m tall, with racemes more
than 9 cm long .... **H. triticeus** (25 26 QLD)
Plant usually less than 1 m tall, with racemes less than
6 cm long .... **H. contortus** (25 26 27 28 29 NSW WA QLD)

HYGROCHLOA

Inflorescence 6-10 cm long; culms prostrate .... **H. aquatica** (25)
Inflorescence 12-25 cm long; culms erect .... **H. cravenii** (25)

HYMENACHNE

One species .... **H. acutigluma** (25 QLD)

HYPARRHENIA

One species .... ***H. hirta** (28 NSW VIC SA WA QLD)
H. quarrei

IMPERATA

One species .... **I. cylindrica** (25 26 NSW VIC TAS SA WA QLD)
I. cylindrica var. *major*

ISACHNE

1. Spikelets 2-3 mm long .... **I. globosa** (25 NSW VIC SA QLD)
I. australis
Spikelets less than 1.5 mm long 2

2. Upper glume hairy; upper lemma glabrous; perennial .... **I. confusa** (25 QLD)
Upper glume glabrous; upper lemma hairy; annual .... **I. pulchella** (25 WA QLD)
I. miliacea, I. brassii

ISCHAEMUM

1. Base of joint and pedicel producing a distinct pore .... **I. tropicum** (25 QLD)
Base of joint and pedicel without a pore 2

2. Lower glume of sessile spikelet transversely rugose 3
Lower glume of sessile spikelet not transversely rugose 4

3. Pedicelled spikelet developed .... **I. rugosum** var. **rugosum** (25 QLD)
Pedicelled spikelet much reduced .... **I. rugosum** var. **segetum** (25 QLD)

4. Decumbent or stoloniferous habit .... **I. decumbens** (25 QLD)
Erect habit 5

5. Lower glume with transverse undulations .... **I. barbatum** (25)
Lower glume smooth 6

6. Racemes usually single; upper glume awned .... **I. fragile** (25 QLD)
Racemes paired; upper glume acuminate 8

7. Nodes glabrous .... **I. australe** var. **arundinaceum** (26 27 WA QLD)
I. arundinaceum
Nodes hairy 8

8. Leaves, rachis internodes and pedicels hairy ....
.... **I. australe** var. **villosum** (26 27 QLD)
I. villosum
Leaves, rachis internodes and pedicels glabrous ....
.... **I. australe** var. **australe** (25 26 27 NSW WA QLD)

ISEILEMA

1. Inflorescence readily disarticulating at maturity 2
Inflorescence not disarticulating at maturity 4

2. Racemes ± exserted from floral sheaths .... **I. macratherum** (25 26 28 WA QLD)
Racemes enclosed within floral sheaths 3

3. Involucral spikelets present in lowest racemes ....
.... **I. vaginiflorum** (25 26 27 28 29 NSW SA WA QLD)
Involucral spikelets absent .... **I. fragile** (25 26 27 WA QLD)

4. Involucral spikelets 4-6.5 mm long 5
Involucral spikelets 3-4 mm long 9

5. Sessile spikelets glabrous at base .... **I. calvum** (27 WA QLD)
Sessile spikelets hairy at base 6

6. Lower glume of involucral spikelet ciliate on keels .... **I. ciliatum** (26 WA QLD)
Lower glume of involucral spikelet minutely scabrid on keels 7

7. Floral sheaths not glandular on keel; involucral
spikelets 4-5 mm long .... **I. convexum** (NT QLD)
Floral sheaths glandular on keel; involucral spikelets
5-6.5 mm long 8

8. Hairs of raceme base 2-3 mm long .... **I. windersii** (25 27 28 QLD)
Hairs of raceme base c. 4.5 mm long .... **I. trichopus** (27 WA)

9. Pedicels of involucral spikelets bearded throughout ....
.... **I. dolichotrichum** (28 29 WA QLD)
Pedicels of involucral spikelets bearded only at base 10

10. Raceme base with hairs to 1.5 mm long or glabrous ....
.... **I. membranaceum** (25 26 27 28 29 NSW SA WA QLD)
Raceme base with hairs 2-5 mm long .... **I. eremaeum** (28 SA WA QLD)

LEERSIA

One species .... **L. hexandra** (25 NSW QLD)

LEPTOCHLOA

Robust grass with hard woody culms; racemes subdigitate ....
.... **L. digitata** (26 28 29 NSW SA WA QLD)
Slender to moderately robust grass with soft
compressible culms; racemes not subdigitate .... **L. neesii** (25 26 27 WA QLD)
L. brownii

LEPTURUS

1. Spikelets paired on each rachis node .... **L. geminatus** (25 QLD)
Spikelets solitary on each rachis node 2

2. Lemma 4.5-5 mm long .... **L. repens** (25 QLD)
Lemma 2.3-3.5 mm long 3

3. Spikes mainly projected above foliage, flexuous .... **L. xerophilus** (25 WA QLD)
Spikes mainly among foliage, stiff .... **L.** sp. Blake 17514 (25)

***LOLIUM**

1. Glume 1/4-3/4 spikelet length 2
Glume ± equal to spikelet length 3

2. Culms green to straw-coloured .... *L. perenne (29 NSW VIC TAS NT SA WA QLD)
L. perenne var. *cristatum*
Culms reddish, particularly at nodes .... ***L. perenne x L. rigidum** (29 NSW VIC SA WA QLD)

3. Lemmas awnless or with awns shorter than 3 mm .... ***L. rigidum** (29 NSW VIC TAS SA WA QLD)
Lemmas with awns exceeding 5 mm .... ***L. x hubbardii** (29 NSW VIC TAS SA WA QLD)

***MELINIS** (*RHYNCHELYTRUM*)
One species .... ***M. repens** (25 29 NSW VIC WA QLD)
Rhynchelytrum repens

MICRAIRA
1. Leaf-blades with prominent wart-like glands along margins .... **M. viscidula** (25)
Leaf-blades without wart-like glands 2

2. Inflorescence a compact spike 3
Inflorescence a contracted panicle 5

3. Spikes not exserted above subtending leaves; leaf-blade with one very broad nerve .... **M. inserta** (25)
Spikes well exserted above subtending leaves; leaf-blades without one very broad nerve 4

4. Glumes hairy .... **M. subspicata** (25)
Glumes glabrous .... **M. compacta** (25)

5. Lemma 6-9-nerved, palea 5-7-nerved .... **M. multinervia** (25)
Lemma 1-4-nerved, palea 2-nerved 6

6. Leaf-blades 7-10-nerved 7
Leaf-blades 1-5-nerved 8

7. Inflorescence shortly exserted, branches without glands .... **M. dentata** (25)
Inflorescence well exserted, branches glandular .... **M. pungens** (25)

8. Glumes extended into a spine 0.2-0.5 mm long .... **M. spinifera** (25)
Glumes without a distinct spine 9

9. Leaf-blades 5-7-nerved .... **M. adamsii** (25)
Leaf-blades 1-3-nerved .... **M. tenuis** (25)

MICROCHLOA
One species .... **M. indica** (25)

MNESITHEA (*COELORACHIS, HACKELOCHLOA*)

1. Pedicels free from rachis .... **M. rottboellioides** (25 26 WA QLD)
Coelorachis rottboellioides
Pedicels fused to rachis 2

2. Spikes compressed; lower glume of sessile spikelet with ornate sculpturing .... **M. granularis** (25 WA QLD)
Hackelochloa granularis
Spikes cylindrical; lower glume of sessile spikelet smooth ....
.... **M. formosa** (25 26 28 WA QLD)
Rottboellia formosa

MONACHATHER

One species .... **M. paradoxus** (28 29 NSW SA WA QLD)
Danthonia bipartita

NEURACHNE

Spikelets 7-11 mm long; culm-nodes glabrous .... **N. tenuifolia** (29)
Spikelets 5-7 mm long; culm-nodes hairy .... **N. munroi** (28 29 NSW SA QLD)

OPHIUROS

One species .... **O. exaltatus** (25 WA QLD)
O. megaphyllus

OPLISMENUS

1. Length/width ratio of leaf blades greater than 10 ....
.... **O. hirtellus** subsp. **imbecillis** (25 NSW VIC QLD)
O. imbecillis, O. undulatifolius var. *imbecillis*
Length/width ratio of leaf blades less than 7 2

2. Basal racemes more than 4 cm long .... **O. compositus** (25 QLD)
Basal racemes less than 2 cm long .... **O. burmannii** (25 QLD)

ORYZA

1. Ligules of lower leaves to 6 mm long 2
Ligules of lower leaves 15-45 mm long 3

2. Spikelets 6.5-8.4 mm long .... **O. australiensis** (26 28 WA QLD)
Spikelets 3.7-6.4 mm long .... **O. minuta** (25 QLD)

3. Spikelets persistent .... ***O. sativa** (25 WA QLD)
Spikelets deciduous .... **O. rufipogon** (25 26 QLD)
O. meridionalis

OXYCHLORIS

One species .... **O. scariosa** (25 26 27 28 29 NSW SA WA QLD)
Chloris scariosa

PANICUM

1. Lower glume more than 1/3 spikelet length 2
Lower glume 1/8-1/3 spikelet length 10

2. Lower floret male .... *__P. antidotale__ (28 29 NSW SA WA QLD)
Lower floret sterile 3

3. Lower glume obtuse to sub-acute 4
Lower glume acute to acuminate 5

4. Lower glume less than half spikelet length .... **P. luzonense** (25)
P. cambogiense
Lower glume at least half spikelet length .... **P. trichoides** (25 WA QLD)

5. Lower glume at least 3/4 spikelet length 6
Lower glume 1/2 - 2/3 spikelet length 9

6. Lower glume ± equal to spikelet length or longer 7
Lower glume shorter than spikelet 8

7. Spikelet 2.5-3 mm long .... **P. mindanaense** (25 26 27 28 WA QLD)
P. delicatum
Spikelet at least 4 mm long .... **P. trachyrhachis** (25 26 WA QLD)

8. Leaves glabrous .... **P. seminudum** var. **seminudum** (25 WA QLD)
Leaves hairy .... **P. seminudum** var. **cairnsianum** (QLD)

9. Nodes and base distinctly hairy ....
.... **P. effusum** var. **effusum** (25 26 28 NSW VIC SA WA QLD)
Nodes and base glabrous or slightly hairy ....
.... **P. effusum** var. **simile** (25 NSW VIC QLD)
P. fulgidum, P. simile

10. Lower floret male 11
Lower floret sterile 12

11. Leaf hairy at junction of sheath and blade ....
.... *__P. maximum__ var. **coloratum** (25 QLD)
Urochloa maxima var. *coloratum*
Leaf glabrous at junction of sheath and blade ....
.... *__P. maximum__ var. **maximum** (25 NSW WA QLD)
Urochloa maxima var. *maxima*

12. Aquatic or swamp grasses .... **P. paludosum** (25 NSW QLD)
Non-aquatic grasses 13

13. Inflorescence branches ± flexous, lower ones solitary 14
Inflorescence branches rigid and spreading, lower ones
whorled 15

14. Upper glume 9-11-nerved; glumes with distinct rachilla between them .... ***P. gilvum** (25 NSW VIC QLD)
P. laevifolium var. *contractum, P. schinzii* auct.
Upper glume 7-nerved; glumes without distinct rachilla between them .... **P. laevinode** (25 26 27 28 29 NSW SA WA QLD)
P. whitei

15. Spikelets 2.5-2.8 mm long .... **P. decompositum** var. **tenuior** (25 27 QLD)
Spikelets 3-3.5 mm long ....
P. decompositum var. **decompositum** (25 26 27 28 29 NSW VIC SA WA QLD)
Spikelets 3.5-4.1 mm long .... **P. latzii** (25 27 WA QLD)
P. decompositum var. *acuminatissimum*

PARACTAENUM (*PLAGIOSETUM*)
Spikelets subtended by several united bristles ....
.... **P. refractum** (28 29 NSW SA WA QLD)
Plagiosetum refractum
Spikelets subtended by simple bristles in most cases ....
.... **P. novae-hollandiae** subsp. **reversum** (29 NSW SA WA QLD)

PARANEURACHNE
One species .... **P. muelleri** (27 28 29 SA WA QLD)
Neurachne muelleri

PASPALIDIUM

1. Upper glume 9-13-nerved; fertile floret curved in profile 2
Upper glume 5-7(-9)-nerved; fertile floret not curved in profile 3

2. Spikelets 1.4-1.5 mm wide .... **P. retiglume** (26 27 WA QLD)
Spikelets 1-1.1 mm wide .... **P. reflexum** (26 28 29 WA)

3. Racemes reduced to 1 or 2 spikelets .... **P. rarum** (25 26 27 28 NSW WA QLD)
Racemes not reduced 4

4. Spikelets irregularly arranged on raceme axes 5
Spikelets regularly arranged on raceme axes 8

5. Annuals with compressible culms 6
Perennials with wiry or setaceous culms 7

6. Spikelets 2-2.4 mm long; culms smooth ... **P. clementii** (28 29 NSW SA WA QLD)
Spikelets 2.75-3.1 mm long; culms ± scabrous ....
.... **P. basicladum** (28 29 SA WA QLD)

7. Culms bluish-green; spikelets 2.25-3.5 mm long; leaves not filiform .... **P. constrictum** (28 29 NSW VIC SA WA QLD)
P. gracile var. *rugosum*
Culms bright green, spikelets 2-2.75 mm long; leaves filiform .... **P. gracile** (27 NSW VIC SA WA QLD)

8. Spikelets more than 2.5 mm long 9
Spikelets less than 2.5 mm long 10

9. Lower racemes often as long as or longer than internodes
of main axis between them .. **P. jubiflorum** (25 26 27 NSW VIC SA WA QLD)
Lower racemes shorter than internodes of main axis
between them .... **P. udum** (25 QLD)

10. Fertile floret coarsely transversely rugulose .... **P. disjunctum** (25 NSW QLD)
P. breviflorum
Fertile floret finely transversely rugulose .... **P. distans** (25 NSW WA QLD)
P. radiatum

PASPALUM

1. Inflorescence of 2 racemes at end of a culm, sometimes
with a third one below 2
Inflorescence of 2 - many racemes along a common
elongated axis 3

2. Spikelets c. 1.5 mm long .... ***P. conjugatum** (25 NSW WA QLD)
Spikelets 2.5-4.5 mm long .... **P. vaginatum** (25 NSW SA WA QLD)
P. distichum auct.

3. Spikelets borne singly in 2 rows along raceme ....
.... **P. scrobiculatum** (25 26 NSW WA QLD)
P. commersonii, P. orbiculare
Spikelet borne in pairs in 4 regular or irregular rows
along raceme 4

4. Fertile lemma brown and shiny, distinctly convex .... ***P. plicatulum** (25 QLD)
Fertile lemma white to straw coloured, not shining,
gently convex .... **P. longifolium** (25 QLD)

PENNISETUM

1. Rachis cylindric .... ***P. glaucum** (25 NSW WA QLD)
P. americanum, P. typhoides
Rachis angular 2

2. Involucre bristles scaberulous; rachis hairy .... **P. basedowii** (27 WA QLD)
Involucre bristles hairy; rachis glabrous or scaberulous 3

3. Spikelet sessile within involucre ....
.... ***P. polystachion** subsp. **polystachion** (25 QLD)
Spikelet pedicelled within involucre 4

4. Spikelets with 1 spikelet per involucre ....
.... ***P. pedicellatum** subsp. **unispiculum** (25 WA QLD)
Spikelets with 2-5 spikelets per involucre ....
.... ***P. pedicellatum** subsp. **pedicellatum** (25 WA)

PEROTIS

One species .... **P. rara** (25 26 27 28 29 NSW SA WA QLD)

PHEIDOCHLOA

One species .... **P. gracilis** (25 QLD)

PHRAGMITES

Upper glume 5-9 mm long; lowest node of inflorescence
with few branches .... **P. australis** (29 NSW VIC TAS SA WA QLD)
P. communis

Upper glume 4-6 mm long; lowest node of inflorescence
with many branches .... **P. vallatoria** (25 28 29 SA WA QLD)
P. karka

PLECTRACHNE

1. Spikelets up to 8 mm long (excluding awns); lemmas
membranous .... **P. bynoei** (26 WA)
Spikelets more than 8 mm long; lemmas hardened to
some degree 2

2. Lemma with a transverse line or thickening at base of
lobes 3
Lemma without a transverse line or thickening at base of
lobes 5

3. Glumes 15-20 mm long .... **P. schinzii** (26 27 28 29 WA QLD)
Glumes up to 12 mm long 4

4. Lemma with a transverse line ....
.... **P. pungens** var. **pungens** (25 26 27 28 29 WA QLD)
Lemma with a transverse thickening ....
.... **P. pungens** var. **callosum** (25 26 27 WA QLD)

5. Glumes with long awns .... **P. aristiglumis** (25)
Glumes awnless or with short awns 6

6. Lower culm internodes with woolly hairs 7
Lower culm internodes glabrous 8

7. Lemmas awned, awns strongly curved or contorted .... **P. contorta** (25)
Lemmas 3-awned, awns straight or slightly bent .... **P. melvillei** (25 26 29 WA)

8. Lemmas 1-awned .... **P. uniaristata** (25)
Lemmas 3-awned 9

9. Glumes shortly awned, shorter than combined length of
florets .... **P.** sp. Lazarides 2871 (26)
Glumes awnless, same length as combined length of
florets .... **P.** sp. Latz 2108 (28)

POA

One species .... ***P. annua** (29 NSW VIC TAS SA WA QLD)

POLYPOGON

One species .... ***P. monspeliensis** (26 NSW VIC TAS SA WA QLD)

PSEUDOCHAETOCHLOA

One species, female plant *Pennisetum*-like .... **P. australiensis** (26 WA)
Pennisetum arnhemicum

PSEUDOPOGONATHERUM

Spikelets 2.5-3 mm long .... **P. contortum** (25 WA QLD)
P. collinum
Spikelets 3.5-4 mm long .... **P. irritans** (25 WA QLD)

PSEUDORAPHIS

Inflorescence c. 30 cm long; leaf blades acute, to 3.5 cm long .... **P. minuta** (25)
Inflorescence longer than 50 cm long; leaf blades acuminate, longer than 5 cm long .... **P. spinescens** (25 28 NSW VIC SA WA QLD)
P. abortiva, P. aspera

ROTTBOELLIA

One species .... **R. cochinchinensis** (25 NSW QLD)
R. exaltata

SACCIOLEPIS

Spikelets 2.5-3 mm long, acuminate .... **S. indica** (25 NSW WA QLD)
Spikelets 1-1.2 mm long, acute or subobtuse .... **S. myosuroides** (25 26 WA QLD)

*SCHISMUS

One species .... ***S. barbatus** (29 NSW VIC SA WA)

SCHIZACHYRIUM

1. Sessile spikelets dorsally compressed, 4-8 times as long as wide 2
Sessile spikelets ± laterally compressed, 7-13 times as long as wide 5

2. Lower glume of sessile spikelet not winged along margin .... **S. pseudeulalia** (25 WA QLD)
Lower glume of sessile spikelet winged along margin, at least above middle 3

3. Rachis internode with a dense oblique beard of long hairs .... **S. fragile** (25 26 27 28 NSW WA QLD)
S. obliqueberbe
Rachis internode glabrous or diffusely hairy 4

4. Spikelets 3.5-4.5 mm long, 0.6-0.7 mm wide .... **S. perplexum** (25 QLD)
Spikelets 5-8 mm long, 1.3-1.6 mm wide .... **S. pachyarthron** (25 26 28 WA QLD)

5. Rachis internodes and pedicels very slender with a dense
± horizontal band of long hairs above middle .. **S. crinizonatum** (25 WA QLD)
Rachis internodes and pedicel ± stout, with hairs
diffuse or marginal and not in a horizontal band .... **S. occultum** (25 QLD)

SEHIMA
One species .... **S. nervosum** (25 26 27 NSW WA QLD)

SETARIA
1. Bristles retrorsely barbed ...... ***S. verticillata** (26 28 NSW VIC TAS SA WA QLD)
S. adhaerens, S. carnei
Bristles antrorsely barbed 2

2. Perennials .... **S. oplismenoides** (25 QLD)
Annuals 3

3. Inflorescence an open panicle of racemes .... **S. dielsii** (28 29 SA WA QLD)
Inflorescence a tightly contracted false spike 4

4. Upper glume half spikelet length ....
.... ***S. pumila** subsp. **pallide-fusca** (25 NSW QLD)
S. pallide-fusca
Upper glume more than half spikelet length 5

5. Spikelets more than 3.5 mm long .... **S. queenslandica** (25 WA QLD)
Spikelets up to 3.4 mm long 6

6. Spikelets 2.5-2.9 mm long; upper glume 3/4 spikelet
length .... **S. surgens** (25 26 27 28 NSW WA QLD)
S. brownii
Spikelets 3-3.4 mm long; upper glume almost as long as
spikelet .... **S. apiculata** (25 26 WA QLD)

SORGHUM
1. Pedicelled spikelet much reduced or absent 2
Pedicelled spikelet well developed 4

2. Pedicelled spikelet absent or reduced to a minute rudiment ....
.... **S. angustum** (25 QLD)
Pedicelled spikelet reduced to one or both glumes 3

3. Sessile spikelet c. 10 mm long .... **S. macrospermum** (25)
Sessile spikelet c. 4 mm long .... **S. laxiflorum** (25 QLD)

4. Awns of sessile spikelet 0-2.5 cm long 5
Awns of sessile spikelet 3.5-9 cm long 6

5. Inflorescence axis much thicker than branches, grains
large, exposed at maturity .... ***S. bicolor** (25 NSW WA QLD)
Inflorescence axis slightly thicker than branches; grains
small, enclosed by glumes at maturity .... ***S. x almum** (25 27 29 WA QLD)

6. Inflorescence branches 1-2-jointed 7
Inflorescence branches with several joints 12

7. Ovary and grain with a tuft of apical hairs 8
Ovary and grain glabrous 9

8. Sessile spikelet subulate or elliptic; lower glume keels
not thickened in lower part and without wings;
lodicules glabrous .... **S. intrans** (25)
Sessile spikelet obovate; lower glume keels thickened in
lower part and with wings; lodicules ciliate .... **S. extans** (25)

9. Lower glume of sessile spikelet not inflated; apical keels
flattened and winged in upper part .... **S. brachypodum** (25)
Lower glume of sessile spikelet inflated; apical keels
ribbed and wingless or absent 10

10. Sessile spikelet elliptic, narrowed at apex .... **S. stipoideum** (25 26 27 28 WA)
Sessile spikelet obovate, not narrowed at apex 11

11. Apical keels present; ligule 1.3-2.3 mm long; pedicelled
spikelets persistent .... **S. bulbosum** (26 WA)
Apical keels poorly developed or absent; ligule 2.5-5.8 mm
long; pedicelled spikelets caducous .... **S. ecarinatum** (25 WA)

12. Callus 3-10 mm long, long-pungent; sessile spikelet
9.5-18 mm long .... **S. interjectum** (25 27 WA QLD)
Callus 0.3-3 mm long, shortly pungent to obtuse;
sessile spikelet4.5-10 mm long 13

13. Callus 0.8-3 mm long, shortly pungent; articulation
joint longer than wide .... **S. plumosum** var. **plumosum** (25 26 27 28 WA QLD)
Callus to 0.7 mm long; articulation joint as wide as long 14

14. Sessile spikelet 4.5-6 mm long .... **S. matarankense** (25 26)
Sessile spikelet 6-9 mm long 15

15. Perennial; sessile spikelet 8-9 mm long .... **S. grande** (25 QLD)
Annual; sessile spieklet 6-7 mm long .... **S. timorense** (25 26 27 28 WA QLD)
S. australiense

SPATHIA
One species .... **S. neurosa** (27 28 QLD)

SPINIFEX

One species .... **S. longifolius** (25 WA QLD)

SPOROBOLUS

1. Lowest node of inflorescence with whorled branches 2
   Lowest node of inflorescence with 1-2 branches 7

2. Most of inflorescence branches whorled 3
   Only lowest inflorescence branch whorled 6

3. Spikelets uniformly distributed in inflorescence; caryopsis
   globular .... **S. australasicus** (25 26 27 28 SA WA QLD)
   Spikelets situated on apical 1/3-2/3 of inflorescence
   branches; caryopsis not globular 4

4. Inflorescence branches not all whorled; ligule 0.35-1 mm
   long .... **S. coromandelianus** (25 WA QLD
   Inflorescence branches all, except uppermost, whorled:
   ligule c. 0.1 mm long 5

5. Spikelets 1.1-1.5 mm long; caryopsis quadrangular .. **S. pulchellus** (25 26 27 QLD)
   Spikelets 1.6-1.8 mm long; caryopsis lenticular .... **S. lenticularis** (25 QLD)

6. Inflorescence a very open panicle with small delicate
   uniformly distributed spikelets ..... **S. caroli** (27 28 29 NSW VIC SA WA QLD)
   Inflorescence with spikelets ± clustered on branches ....
   .... **S. actinocladus** (25 27 28 29 NSW SA WA QLD)

7. Upper glume 1/4-3/4 spikelet length 8
   Upper glume ± as long as spikelet 10

8. Upper glume ± 1/3 spikelet length ....
   .... ***S. pyramidalis** var. **pyramidalis** (29 NSW QLD)
   Upper glume 1/2 spikelet length or more 9

9. Spikelets 1.6-2.3 mm long .... ***S. natalensis** (25 QLD)
   Spikelets 1.2-1.6 mm long .... **S. blakei** (28 29 NSW SA WA QLD)

10. Stoloniferous; leaf sheaths usually shorter than internodes;
    spikelets ± 2 mm long .... **S. mitchellii** (27 28 NSW VIC SA WA QLD)
    S. benthamii
    Rhizomatous; leaf sheaths usually longer than internodes;
    spikelets ± 3 mm long ... **S. virginicus** (25 27 28 NSW VIC TAS SA WA QLD)

STIPA

1. Awn falcate, bristle curved 2
   Awn bigeniculate or straight, bristle straight 5

2. Lower glume 8-14 mm long; upper glume 6-12.5 mm long; floret 4-6.5 mm long ..... **S. trichophylla** (29 NSW VIC SA WA)
Lower glume 14-20 mm long; upper glume 11.5-18 mm long; floret 7-8 mm long 3

3. Leaves coarse ..... **S. nitida** (29 NSW SA WA QLD)
Leaves very fine 4

4. Leaf blades and sheaths pilose with long spreading hairs ..... **S. trichophylla** (NSW VIC NT SA WA)
Leaf blades and sheaths glabrous or with short hairs ..... **S. scabra** subsp. **scabra** (29 NSW VIC TAS SA WA QLD)

5. Glumes very broad, inflated round floret; callus short and strongly hooked ..... **S. feresetacea** (29)
Glumes narrow, close around floret; callus fine and straight 6

6. Panicle not exserted above basal leaves, with less than 30 spikelets ..... **S. centralis** (25)
Panicle well exserted above basal leaves, with more than 30 spikelets ..... **S. aquarii** (25)

SYMPLECTRODIA

Plants 1.8-3 m tall; inflorescence more than 40 cm long ..... **S. lanosa** (25)
Plants up to 1 m tall; inflorescence 7-17 cm long ..... **S. gracilis** (25)

THAUMASTOCHLOA

1. Mature spikes mostly with 4 or more joints 2
Mature spikes with 1-3 joints 4

2. Spikes more than 2 mm thick 3
Spikes less than 2 mm thick ..... **T. pubescens** (25 WA QLD)
T. constricta

3. Spikes not constricted at nodes ..... **T. major** (25 WA QLD)
Spikes constricted at nodes ..... **T. monilifera** (25 QLD)

4. Spikes 11-20 mm long, 2-3 rarely 1, jointed ..... **T. striata** (25)
Spikes 3-9 mm long, 1 rarely 2, jointed 5

5. Culm with 6-9 nodes; lower glume smooth or slightly rugulose ..... **T. major** (25 WA QLD)
Culm with 10-15 nodes; lower glume not smooth 6

6. Lower glume distinctly rugulose ..... **T. brassii** (25 QLD)
Lower glume longitudinally ribbed ..... **T. rubra** (25)

THEMEDA

1. Involucral spikelet 19-28 mm long .... **T. avenacea** (26 28 29 NSW VIC SA WA QLD)
Involucral spikelet 6-14 mm long 2

2. Fertile spikelet with an awn 7-9 cm long and a pungent callus 3-4 mm long .... **T. arguens** (25 WA QLD)
T. frondosa
Fertile spikelet with an awn less than 7 cm long and a callus 1-3 mm long 3

3. Perennial; involucral spikelets 8-14 mm long; sessile spikelets 4-5 mm long .... **T. triandra** (25 26 27 28 29 NSW VIC TAS SA WA QLD)
T. australis
Annual; involucral spikelets 4-7 mm long; sessile spikelets 4-5 mm long .... ***T. quadrivalvis** (25 WA NSW QLD)

THUAREA

One species .... **T. involuta** (25 QLD)

THYRIDOLEPSIS

1. Spikelets ± glabrous, although possessing tubercled-based bristles .... **T. xerophila** (29 NSW SA WA QLD)
Neurachne xerophila
Spikelets with short and/or long hairs 2

2. Inflorescence less than 4.5 cm long .... **T. mitchelliana** (28 29 NSW SA WA QLD)
Neurachne mitchelliana
Inflorescence 5-9 cm long ....**T. multiculmis** (29 SA WA)
Neurachne multiculmis

TRAGUS

One species .... **T. australianus** (26 27 28 29 NSW VIC SA WA QLD)

TRIODIA

1. Leaf-blades flat or incurved-tubular .... **T. procera** (25 26 QLD)
Leaf-blades terete due to conduplicate folding 2

2. Leaf-sheaths resinous; culms laterally flattened 3
Leaf-sheaths not resinous nor culms laterally flattened 11

3. Spikelets up to 6 mm 4
Spikelets more than 6 mm long 6

4. Lemma with 3 small pointed lobes, median being twice as long as laterals .... **T. stenostachya** (25 26 WA QLD)
Lemma with 3 minute teeth 5

5. Spikelets 4-5 mm long; glumes acute; palea not winged ... **T. microstachya** (25 26 WA QLD)
Spikelets 6-8 mm long; glumes emarginate or two lobed;
palea winged ... **T. radonensis** (25)

6. Spikelets 2-3 mm wide ... **T. pungens** var. **linearis** (27 QLD)
Spikelets more than 3 mm wide ... 7

7. Palea shorter than total length of lemma (body & lobes) ... 8
Palea almost as long as total length of lemma ... **T. hubbardii** (28 29)

8. Lemma lobes 1/3-1/2 lemma length ... **T.** sp. Latz 1265 (28)
Lemma lobes 1/8-1/3 lemma length ... 9

9. Spikelets 4-8 mm long, 4-7 flowered; lemma lobes less
than 1 mm long ... **T. burbidgeana** (25 WA)
Spikelets 7-14 mm long, 5-10 flowered; lemma lobes
more than 1 mm long ... 10

10. Lemma lobes 1/4-1/3 lemma length (some are smaller) ... **T. pungens** var. **pungens** (26 27 28 29 WA QLD)
Lemma lobes c. 1/8 lemma length ... **T. pungens** var. **parvidentata** (29)

11. Inflorescence a simple or compound raceme or spike ... 12
Inflorescence an open panicle ... 16

12. Inflorescence a simple raceme or spike ... **T. spicata** (26 28 29 WA)
Inflorescence spicate or racemose on lateral branches ... 13

13. Lemma with 3 groups of 3 nerves; leaf sheaths hairy or
tomentose at base ... **T. roscida** (26 WA)
Lemma with 3 strong nerves; leaf-sheaths glabrous ... 14

14. Lemma membranous ... **T. fitzgeraldii** (26 WA)
Lemma leathery ... 15

15. Spikelets 4.5-6 mm long ... **T. racemigera** (26 WA)
Spikelets more than 6 mm long ... **T. longiceps** (27 28 29 SA WA QLD)

16. Lemma lobes as long as or longer than base ... **T. basedowii** (28 29 NSW SA WA QLD)
Lemma lobes shorter than base ... 17

17. Inflorescence very open; glumes shortly awned ... **T. plectrachnoides** (25 WA)
Inflorescence loosely narrow or small; glumes not shortly
awned ... 18

18. Lemma notched or truncate apically, with a mucro or
short awn in notch; palea nerves not winged ... **T. irritans** (29 SA WA)

Lemma 3-lobed or 3-toothed apically; palea nerves winged 19

19. Leaf-sheath orifice and base of blade with erect or spreading hairs 20
Leaf-sheath orifice and base of blade with woolly tangled or short hairs 22

20. Median lobe longer than laterals .... **T. inaequiloba** (NT WA)
Median lobe equal in length to laterals 21

21. Lemmas 3-toothed apically .... **T. intermedia** (26 28 WA)
Lemmas 3-lobed to 1/4-1/3 of lemma length ...... **T. wiseana** var. **wiseana** (26 WA)

22. Leaf-sheaths orifice with very short hairs ...... **T. longiceps** (27 28 29 SA WA QLD)
Leaf-sheath orifice with woolly, tangled hairs 23

23. Lemma with a dense fringe of hairs between lateral nerve group and margin .... **T. clelandii** (28 29)
Lemma without a marginal fringe of hairs .... **T. inutilis** (26 27 WA)

TRIPOGON

One species .... **T. loliiformis** (25 27 28 29 NSW VIC SA WA QLD)

This species is extremely variable with regard to spikelet size, inflorescence and leaf-blade morphology and leaf indumentum type. Further study may reveal the necessity to formally recognise this variation.

TRIRAPHIS

One species .... **T. mollis** (28 29 NSW VIC SA WA QLD)

URANTHOECIUM

One species .... **U. truncatum** (28 NSW SA QLD)

UROCHLOA

One species .... ***U. mosambicensis** (25 28 29 NSW WA QLD)
U. rhodesiensis, U. pullulans

VETIVERIA

1. Sessile spikelet more than 8 mm long, callus more than 2.5 mm long .... **V. filipes** (25 NSW QLD)
V. intermedia
Sessile spikelet less than 7.5 mm long, callus less than 2 mm long 2

2. Callus hairs 0.75-1.5 mm long, ± fulvous; racemes 2-3-jointed .... **V. pauciflora** (25 26 27 WA QLD)
Callus hairs 2-3 mm long, whitish; racemes 3-6-jointed .... **V. elongata** (25 QLD)

VULPIA

One species .... ***V. myuros** forma **myuros** (25 NSW VIC TAS SA WA QLD)

WHITEOCHLOA

1. Inflorescence racemose, spikelets on pedicels up to 6 mm long 2
Inflorescence paniculate, spikelets on pedicels up to 30 mm long 4

2. Spikelets hairy on at least upper glume .... **W. semitonsa** (25)
Spikelets glabrous 3

3. Perennial; upper lemma finely transversely rugose .... **W. airoides** (25 WA QLD)
Panicum airoides
Annual; upper lemma smooth .... **W. cymbiformis** (25 26 27 28 WA QLD)
Panicum cymbiforme

4. Spikelets glabrous .... **W. capillipes** (25 26 WA QLD)
Panicum capillipes
Spikelets hairy .... **W. multiciliata** (25)

XEROCHLOA

1. Inflorescence spike quite glabrous with 3-6 spikelets
.... **X. imberbis** (25 26 WA QLD)
Inflorescence spike densely woolly with 2 spikelets 2

2. Inflorescence rachis terminating in a membranous many-nerved scale .... **X. barbata** (25 WA QLD)
Inflorescence rachis terminating in hard 3 - angled apex ....
.... **X. laniflora** (26 28 WA QLD)

YAKIRRA

1. Inflorescence mostly overtopped by subtending leaves 2
Inflorescence exserted above subtending leaves 4

2. Spikelets 4.7-5.25 mm long .... **Y. muelleri** (25 28 WA QLD)
Ichnanthus muelleri, Panicum muelleri
Spikelets 3-4.5 mm long 3

3. Primary branches appressed to main axis ....
.... **Y. australiensis** var. **australiensis** (26 27 28 29 SA WA QLD)
Ichnanthus australiesis, Panicum australiense
Primary branches exserted and spreading ....
.... **Y. australiensis** var. **intermedia** (25 26 27 WA QLD)

4. Spikelets 5.5-7 mm long .... **Y. majuscula** (25 26 27 WA QLD)
Panicum majusculum
Spikelets 4-5 mm long 5

5. Appendages developed at base of fertile floret .... **Y. pauciflora** (25 26 27 WA QLD)
Ichnanthus pauciflorus, Panicum pauciflorum
Appendages absent .... **Y. nulla** (25)

ZYGOCHLOA
One species .... **Z. paradoxa** (28 29 NSW SA QLD)

LIST OF NORTHERN TERRITORY GRASSES

Accepted names are in roman, unaccepted or synonyms and misapplied names are in *italic*.

Acrachne racemosa (Heyne ex Roemer & Schultes)Ohwi
Acrachne verticillata (Roxb.)Chiov.
Agrostis avenacea J.F.Gmel. var. avenacea
Alloteropsis cimicina (Retz.)Stapf
Alloteropsis semialata (R.Br.)Hitchc.
Amphipogon caricinus F.Muell. var. caricinus
Amphipogon caricinus F.Muell. var. sericeus Vickery
Andropogon gayanus Kunth
Aristida anthoxanthoides (Domin)Henrard
Aristida arenaria Gaudich.
Aristida arida B.K.Simon
Aristida biglandulosa
Aristida blakei B.K.Simon
Aristida browniana Henrard var. *browniana*
Aristida browniana Henrard var. *latifolia* B.K.Simon
Aristida calycina R.Br. var. calycina
Aristida capillifolia Henrard
Aristida contorta F.Muell.
Aristida dominii B.K.Simon
Aristida exserta S.T.Blake
Aristida glumaris Henrard
Aristida heterochaeta Henrard
Aristida hirta auct. non Domin
Aristida hirta Domin
Aristida holathera Domin var. holathera
Aristida holathera Domin var. latifolia (B.K.Simon)B.K.Simon
Aristida hygrometrica R.Br.
Aristida inaequiglumis Domin
Aristida ingrata Domin
Aristida intricata S.T.Blake
Aristida jerichoensis (Domin)Henrard var. subspinulifera Henrard
Aristida latifolia Domin
Aristida latzii B.K.Simon
Aristida lazaridis B.K.Simon
Aristida longicollis (Domin)Henrard
Aristida macroclada Henrard subsp. macroclada
Aristida muelleri Henrard
Aristida nitidula (Henrard)S.T.Blake ex J.M.Black
Aristida novaeguineae Ohwi
Aristida obscura Henrard
Aristida perniciosa Domin
Aristida polyclados Domin
Aristida pruinosa Domin
Aristida queenslandica Henrard var. queenslandica
Aristida schultzii Mez

Aristida streptachne Domin
Aristida strigosa (Henrard)S.T.Blake ex J.M.Black
Aristida superpendens Domin
Aristida utilis F.M.Bailey var. utilis
Arundinella nepalensis Trin.
Arundinella setosa Trin.
Arundo donax L. var. donax
Astrebla elymoides F.Muell.ex F.M.Bailey
Astrebla lappacea (Lindl.)Domin
Astrebla pectinata (Lindl.)F.Muell.ex Benth.
Astrebla squarrosa C.E.Hubb.
Astrebla triticoides (Lindl.)F.Muell.ex Benth
Avena fatua L.

Bambusa arnhemica F.Muell.
Bothriochloa bladhii (Retz.)S.T.Blake subsp. bladhii
Bothriochloa decipiens (Hack.)C.E.Hubb. var. cloncurrensis (Domin)C.E.Hubb.
Bothriochloa ewartiana (Domin)C.E.Hubb.
Bothriochloa intermedia (R.Br.)A.Camus
Bothriochloa pertusa (L.)A.Camus
Brachiaria argentea (R.Br.)Hughes
Brachiaria atrisola (R.D.Webster)B.K.Simon
Brachiaria distachya (L.)Stapf
Brachiaria gilesii (Benth.)Chase
Brachiaria holosericea (R.Br.)Hughes subsp. holosericea
Brachiaria holosericea (R.Br.)Hughes subsp. velutina (R.D.Webster)B.K.Simon
Brachiaria mutica (Forsskal)Stapf
Brachiaria notochthona (Domin)Stapf
Brachiaria piligera (F.Muell.)Hughes var. *intercedens* (Domin)Hughes
Brachiaria piligera (F.Muell.)Hughes
Brachiaria polyphylla (R.Br.)Hughes
Brachiaria praetervisa (Domin)C.E.Hubb.
Brachiaria pubigera (Roemer & Schultes)S.T.Blake
Brachiaria ramosa (L.)Stapf
Brachiaria ramosa (L.)Stapf var. *grandiflora* Hughes
Brachiaria reptans (L.)C.A.Gardner & C.E.Hubb.
Brachiaria subquadripara (Trin.)Hitchc.
Brachiaria windersii C.E.Hubb.
Brachyachne ambigua Ohwi
Brachyachne ciliaris (Benth.)C.E.Hubb.
Brachyachne convergens (F.Muell.)Stapf
Brachyachne prostrata C.A.Gardner & C.E.Hubb.
Brachyachne tenella (R.Br.)C.E.Hubb.
Bromus diandrus Roth
Bromus gussonii Parl.

Capillipedium parviflorum (R.Br.)Stapf
Capillipedium spicigerum S.T.Blake
Cenchrus barbatus Schum.

Cenchrus biflorus Roxb.
Cenchrus brownii Roem. & Schult.
Cenchrus ciliaris L.
Cenchrus echinatus L.
Cenchrus elymoides F.Muell. var. brevisetosus B.K.Simon
Cenchrus elymoides F.Muell. var. elymoides
Cenchrus longispinus (Hack.)Fernald
Cenchrus pauciflorus Benth. var. *longispinus* (Hack.)Jansen & Wachter
Cenchrus pennisetiformis Hochst.& Steud. ex Steud.
Cenchrus setiger Vahl
Cenchrus tribuloides auct. non L.
Chamaeraphis hordeacea R.Br.
Chionachne cyathopoda (F.Muell.)F.Muell. ex Benth.
Chionachne hubbardiana Henrard
Chloris acicularis Lindl.
Chloris acicularis Lindl. var. *queenslandiae* Domin
Chloris barbata auct. non Sw.
Chloris divaricata R.Br.
Chloris gayana Kunth
Chloris inflata Link
Chloris lobata Lazarides
Chloris moorei F.Muell.
Chloris pectinata Benth.
Chloris pilosa Schum.
Chloris pumilio R.Br.
Chloris ruderalis Domin
Chloris virgata Sw.
Chrysopogon aciculatus (Retz.)Trin.
Chrysopogon fallax S.T.Blake
Chrysopogon latifolius S.T.Blake
Chrysopogon pallidus (R.Br.)Trin.ex Steud.
Chrysopogon setifolius Stapf
Clausospicula extensa Lazarides
Coelachne pulchella R.Br.
Coelorachis = Mnesithea
Cymbopogon ambiguus A.Camus
Cymbopogon bombycinus (R.Br.)Domin
Cymbopogon dependens B.K.Simon
Cymbopogon exaltatus auct. non (R.Br.)Domin
Cymbopogon exaltatus (R.Br.)Domin
Cymbopogon obtectus S.T.Blake
Cymbopogon procerus (R.Br.)Domin
Cymbopogon refractus (R.Br.)A.Camus
Cynodon arcuatus J.S.Presl ex C.B.Presl
Cynodon dactylon (L.)Pers. var. *pulchelus* F.Muell.ex Benth.
Cynodon dactylon (L.)Pers.
Cynodon nlemfuensis Vanderyst var. nlemfuensis
Cynodon radiatus Roth ex Roem. & Schult.

Dactyloctenium aegyptium (L.)P.Beauv.
Dactyloctenium radulans (R.Br.)P.Beauv.
Danthonia = Monochather
Dichanthium affine (R.Br.)A.Camus
Dichanthium annulatum (Forsskal)Stapf
Dichanthium aristatum (Poiret)C.E.Hubb.
Dichanthium fecundum S.T.Blake
Dichanthium humilius J.M.Black
Dichanthium sericeum (R.Br.)A.Camus subsp. humilius (J.M.Black)B.K.Simon
Dichanthium sericeum (R.Br.)A.Camus subsp. polystachyum (Benth.)B.K.Simon
Dichanthium sericeum (R.Br.)A.Camus subsp. sericeum
Dichanthium superciliatum (Hack.)A.Camus
Dichanthium tenuiculum (Steud.)S.T.Blake
Digitaria adscendens (Kunth)Henrard
Digitaria ammophila Hughes
Digitaria bicornis (Lam.)Roemer & Schultes
Digitaria breviglumis (Domin)Henrard
Digitaria brownii (Roemer & Schultes)Hughes
Digitaria brownii (Roemer & Schultes)Hughes var. *monostachya* (Benth.)Hughes
Digitaria ciliaris (Retz.)Koeler
Digitaria coenicola (F.Muell.)Hughes
Digitaria ctenantha (F.Muell.)Hughes
Digitaria curvipes Mez
Digitaria diminuta Hughes
Digitaria eriolepis Henrard
Digitaria fumida S.T.Blake
Digitaria gibbosa (R.Br.)P.Beauv.
Digitaria heterantha (Hook.f.)Merr.
Digitaria hystrichoides Vickery
Digitaria leucostachya (Domin)Henrard
Digitaria longiflora (Retz.)Pers.
Digitaria nematostachya (F.M.Bailey)Henrard
Digitaria oraria R.D.Webster
Digitaria papposa (R.Br.)P.Beauv.
Digitaria propinqua (R.Br.)P.Beauv.
Digitaria pruriens (Fischer ex Trin.)Buse
Digitaria queenslandica Henrard
Digitaria robusta Hughes
Digitaria setigera Roth ex Roemer & Schultes
Digitaria speciosa Henrard
Digitaria stenostachya (Benth.)Hughes
Digitaria violascens Link
Dimeria acinaciformis R.Br.
Dimeria chloridiformis (Gaudich.)Schumann & Lauterb.
Dimeria ornithopoda Trin.
Diplachne fusca (L.)P.Beauv.ex Roemer & Schultes
Diplachne muelleri Benth.
Diplachne parviflora (R.Br.)Benth.
Diplachne reptatrix (L.)Druce

Echinochloa colona (L.)Link
Echinochloa elliptica Michael & Vickery
Echinochloa kimberleyensis Michael & Vickery
Echinochloa macrandra Michael & Vickery
Echinochloa praestans Michael
Echinochloa turneriana (Domin)J.M.Black
Ectrosia agrostoides Benth.
Ectrosia appressa S.T.Blake
Ectrosia confusa C.E.Hubb.
Ectrosia danesii Domin
Ectrosia eragrostoides Domin
Ectrosia lasioclada (Merr.)S.T.Blake
Ectrosia laxa S.T.Blake
Ectrosia leporina R.Br.
Ectrosia leporina R.Br. var. *longiglumis* C.E.Hubb.
Ectrosia leporina R.Br. var. *micrantha* Benth.
Ectrosia leporina R.Br. var. *pauciflora* C.E.Hubb.
Ectrosia leporina R.Br. var. *spadicea* (R.Br.)Domin
Ectrosia scabrida C.E.Hubb.
Ectrosia schultzii Benth. var. annua C.E.Hubb.
Ectrosia schultzii Benth. var. schultzii
Eleusine indica (L.)Gaertner
Elionurus citreus (R.Br.)Munro ex Benth.
Elytrophorus spicatus (Willd.)A.Camus
Enneapogon avenaceus (Lindl.)C.E.Hubb.
Enneapogon caerulescens (Gaudich.)N.T.Burb. var. caerulescens
Enneapogon clelandii N.T.Burb.
Enneapogon cylindricus N.T.Burb.
Enneapogon decipiens Kakudidi
Enneapogon eremophilus Kakudidi
Enneapogon glaber N.T.Burb.
Enneapogon intermedius N.T.Burb.
Enneapogon lindleyanus (Domin)C.E.Hubb.
Enneapogon oblongus N.T.Burb.
Enneapogon pallidus (R.Br.)P.Beauv.
Enneapogon pallidus (R.Br.)P.Beauv. var. *breviseta* N.T.Burb.
Enneapogon planifolius N.T.Burb.
Enneapogon polyphyllus (Domin)N.T.Burb.
Enneapogon purpurascens (R.Br.)P.Beauv.
Enneapogon robustissimus (Domin)N.T.Burb.
Enteropogon acicularis (Lindl.)Lazarides *Form A*
Enteropogon acicularis (Lindl.)Lazarides
Enteropogon dolichostachyus (Lagasca)Keng ex Lazarides
Enteropogon minutus Lazarides
Enteropogon ramosus B.K.Simon
Eragrostis amabilis Kuntze
Eragrostis australasica (Steud.)C.E.Hubb.
Eragrostis barrelieri Daveau
Eragrostis basedowii Jedw.

Eragrostis bella Domin
Eragrostis bleeseri Pilger
Eragrostis brownii (Kunth)Nees ex Steud.
Eragrostis chloromelas Steud.
Eragrostis cilianensis (All.)Vign. ex Janchen
Eragrostis concinna (R.Br.)Steud.
Eragrostis confertiflora J.M.Black
Eragrostis contigua Jedw.
Eragrostis cumingii Steud.
Eragrostis curvula (Schrader)Nees
Eragrostis desertorum Domin
Eragrostis diandra (R.Br.)Steud.
Eragrostis dielsii Pilger ex Diels & Pritzel
Eragrostis distans Hack.
Eragrostis elongata (Willd.)Jacq.
Eragrostis eriopoda Benth.
Eragrostis falcata (Gaudich.)Gaudich.ex Steud.
Eragrostis interrupta P.Beauv.
Eragrostis japonica auct. non (Thumb.)Trin.
Eragrostis kennedyae Turner
Eragrostis lacunaria F.Muell.ex Benth.
Eragrostis laniflora Benth.
Eragrostis leptocarpa Benth.
Eragrostis minor Host
Eragrostis parviflora (R.Br.)Trin.
Eragrostis pergracilis S.T.Blake
Eragrostis pilosa (L.)P.Beauv.
Eragrostis pooides P.Beauv.
Eragrostis pubescens (R.Br.)Steud.
Eragrostis rigidiuscula Domin
Eragrostis schultzii Benth.
Eragrostis setifolia Nees
Eragrostis sororia Domin
Eragrostis spartinoides Steud.
Eragrostis speciosa (Roemer & Schultes)Steud.
Eragrostis sp. Blake 12593
Eragrostis sp. Brass 1846
Eragrostis sp. Dunlop 3071
Eragrostis sp. Latz 2015
Eragrostis sp. Latz 2269
Eragrostis sp. Latz 6053
Eragrostis stenostachya (R.Br.)Steud.
Eragrostis sterilis Domin
Eragrostis tenax Jedw. nom.illeg. [non(Kunth)Steud.]
Eragrostis tenella (L.)P.Beauv. ex Roemer & Schultes
Eragrostis tenellula (Kunth)Steud.
Eragrostis xerophila Domin
Eriachne agrostidea F.Muell.
Eriachne aristidea F.Muell.

Eriachne aristidea F.Muell. var. *minor* Hartley
Eriachne armitii F.Muell.ex Benth.
Eriachne avenacea R.Br.
Eriachne basedowii Hartley
Eriachne benthamii Hartley
Eriachne bleeseri Pilger
Eriachne burkittii Jansen
Eriachne burkittii Jansen var. *hirsutissima* Jansen
Eriachne capillaris R.Br.
Eriachne ciliata R.Br.
Eriachne dominii Hartley
Eriachne fastigiata Lazarides
Eriachne festucacea F.Muell.
Eriachne filiformis Hartley
Eriachne flaccida Hartley
Eriachne gardneri Hartley
Eriachne glauca R.Br. var. barbinodis Hartley
Eriachne glauca R.Br. var. glauca
Eriachne helmsii (Domin)Hartley
Eriachne humilis Hartley
Eriachne isingiana J.M.Black
Eriachne laidlawii Jansen
Eriachne melicacea F.Muell.
Eriachne mucronata R.Br. Desert Form
Eriachne mucronata R.Br. Typical Form
Eriachne muelleri Domin
Eriachne nervosa Ewart & Cookson
Eriachne obtusa R.Br. var. *major* Ewart & Davies
Eriachne obtusa R.Br.
Eriachne ovata Nees
Eriachne ovata Nees var. *villosa* Benth.
Eriachne pallescens R.Br.
Eriachne pulchella Domin
Eriachne rara R.Br.
Eriachne schultziana F.Muell.
Eriachne scleranthoides F.Muell.
Eriachne setacea Benth.
Eriachne sp. Dunlop 4563
Eriachne sp. Dunlop 4849
Eriachne sp. Lazarides 7918
Eriachne sp. Lazarides 7926
Eriachne sp. Simon 3007
Eriachne squarrosa R.Br.
Eriachne stipacea F.Muell. var. hirsuta Hartley
Eriachne stipacea F.Muell. var. stipacea
Eriachne sulcata Hartley
Eriachne triodioides Domin
Eriachne triseta Nees
Eriachne yarrabensis Domin

Eriochloa australiensis Stapf ex Thell.
Eriochloa crebra S.T.Blake
Erichloa decumbens F.M.F.M.Bailey
Eriochloa longiflora S.T.Blake
Eriochloa procera (Retz.)C.E.Hubb.
Eriochloa pseudoacrotricha (Stapf ex Thell.)J.M.Black
Eulalia annua B.K.Simon
Eulalia aurea (Bory)Kunth
Eulalia fulva (R.Br.)Kuntze
Eulalia mackinlayi (F.Muell. ex Benth.)Kuntze

Germainia grandiflora (S.T.Blake)Chaianan
Germainia truncatiglumis (F.Muell.ex Benth.)Chaianan

Hackelochloa granularis (L.)Kuntze
Heterachne abortiva (R.Br.)Druce
Heterachne gulliveri Benth. var. *major* C.E.Hubb.
Heterachne gulliveri Benth.
Heteropogon contortus (L.)P.Beauv. ex Roemer & Schultes
Heteropogon triticeus (R.Br.)Stapf
Hygrochloa aquatica Lazarides
Hygrochloa cravenii Lazarides
Hymenachne acutigluma (Steud.)Gilliland
Hyparrhenia hirta (L.)Stapf
Hyparrhenia quarrei Robyns

Ichnanthus = Yakirra
Imperata cylindrica (L.)Raeuschel
Imperata cylindrica (L.)Raeuschel var. *major* (Nees)C.E.Hubb.
Isachne australis R.Br.
Isachne brassii Hitchc.
Isachne confusa Ohwi
Isachne globosa (Thunb.)Kuntze
Isachne miliacea Roth
Isachne pulchella Roth ex Roemer & Schultes
Ischaemum arundinaceum F.Muell. ex Benth.
Ischaemum australe R.Br. var. arundinaceum (F.Muell. ex Benth.)B.K.Simon
Ischaemum australe R.Br. var. australe
Ischaemum australe R.Br. var. villosum (R.Br.)Benth.
Ischaemum barbatum Retz.
Ischaemum decumbens Benth.
Ischaemum fragile R.Br.
Ischaemum rugosum Salisb. var. rugosum
Ischaemum rugosum Salisb. var. segetum (Trin.)Hack.
Ischaemum tropicum B.K.Simon
Ischaemum villosum R.Br.
Iseilema calvum C.E.Hubb.
Iseilema ciliatum C.E.Hubb.
Iseilema convexum C.E.Hubb.

Iseilema dolichotrichum C.E.Hubb.
Iseilema eremaeum S.T.Blake
Iseilema fragile S.T.Blake
Iseilema macratherum Domin
Iseilema membranaceum (Lindl.)Domin
Iseilema trichopus (Benth.)C.E.Hubb.
Iseilema vaginiflorum Domin
Iseilema windersii C.E.Hubb.

Leersia hexandra Sw.
Leptochloa brownii C.E.Hubb.
Leptochloa digitata (R.Br.)Domin
Leptochloa fusca (L.)Kunth
Leptochloa muelleri (Benth.)Stace
Leptochloa neesii (Thwaites)Benth.
Lepturus geminatus C.E.Hubb.
Lepturus repens (Forster)R.Br.
Lepturus sp. Blake 17514
Lepturus xerophilus Domin
Lolium x hubbardii Jansen & Wachter ex B.K.Simon
Lolium perenne L. var. *cristatum* Pers.
Lolium perenne L.
Lolium perenne x rigidum
Lolium rigidum Gaudin

Melinis repens (Willd.)Zizka
Micraira adamsii Lazarides
Micraira compacta Lazarides
Micraira dentata Lazarides
Micraira inserta Lazarides
Micraira multinervia Lazarides
Micraira pungens Lazarides
Micraira spinifera Lazarides
Micraira subspicata Lazarides
Micraira tenuis Lazarides
Micraira viscidula Lazarides
Microchloa indica (L.f.)P.Beauv.
Mnesithea formosa (R.Br.)Koning & Sosef
Mnesithea granularis (L.)Koning & Sosef
Mnesithea rottboellioides (R.Br.)Koning & Sosef
Monachather paradoxus Steud.

Neurachne mitchelliana Nees
Neurachne muelleri Hack.
Neurachne multiculmis Pilger
Neurachne munroi (F.Muell.)F.Muell.
Neurachne tenuifolia S.T.Blake
Neurachne xerophila Domin

Ophiuros exaltatus (L.)Kuntze
Ophiuros megaphyllus Stapf ex Haines
Oplismenus burmannii (Retz.)P.Beauv.
Oplismenus compositus (L.)P.Beauv.
Oplismenus hirtellus (L.)P.Beauv. subsp. imbecillis (R.Br.)U.Scholz
Oplismenus imbecillis Roemer & Schultes
Oplismenus undulatifolius (Ard.)Roemer & Schultes var. *imbecillis* (R.Br.)Hack.
Oryza australiensis Domin
Oryza minuta Presl
Oryza meridionalis N. Ng
Oryza rufipogon Griff.
Oryza sativa L.
Oxychloris scariosa (F.Muell.)Lazarides

Panicum antidotale Retz.
Panicum airoides R.Br.
Panicum australiense Domin
Panicum cambogiense Balansa
Panicum capillipes Benth.
Panicum cymbiforme Hughes
Panicum decompositum R.Br. var. *acuminatissimum* Domin
Panicum decompositum R.Br. var. decompositum
Panicum decompositum R.Br. var. tenuior F.M.Bailey
Panicum delicatum Hughes
Panicum effusum R.Br. var. effusum
Panicum effusum R.Br. var. simile (Domin)B.K.Simon
Panicum fulgidum Hughes
Panicum gilvum Launert
Panicum laevinode Lindl.
Panicum latzii R.D.Webster
Panicum luzonense Presl
Panicum majusculum F.Muell.ex Benth.
Panicum maximum var. coloratum C.T.White
Panicum maximum Jacq. var. maximum
Panicum mindanaense Merr.
Panicum muelleri (Hughes)Lazarides
Panicum paludosum Roxb.
Panicum pauciflorum R.Br.
Panicum seminudum Domin var. cairnsianum Domin
Panicum seminudum Domin var. seminudum
Panicum simile Domin
Panicum trachyrhachis Benth.
Panicum trichoides Sw.
Panicum whitei J.M.Black
Paractaenum novae-hollandiae P.Beauv. subsp. reversum (F.Muell.)R.D.Webster
Paractaenum refractum (F.Muell.)R.D.Webster
Paraneurachne muelleri (Hack.)S.T.Blake
Paspalidium basicladum Hughes
Paspalidium breviflorum Vickery

Paspalidium clementii (Domin)C.E.Hubb.
Paspalidium constrictum (Domin)C.E.Hubb.
Paspalidium disjunctum S.T.Blake
Paspalidium distans (Trin.)Hughes
Paspalidium gracile (R.Br.)Hughes var. *rugosum* Hughes
Paspalidium gracile (R.Br.)Hughes
Paspalidium jubiflorum (Trin.)Hughes
Paspalidium radiatum Vickery
Paspalidium rarum (R.Br.)Hughes
Paspalidium reflexum R.D.Webster
Paspalidium retiglume (Domin)Hughes
Paspalidium udum S.T.Blake
Paspalum commersonii Lam.
Paspalum conjugatum Bergius
Paspalum distichum auct. non L.
Paspalum longifolium Roxb.
Paspalum orbiculare G. Forster
Paspalum plicatulum Michx.
Paspalum scrobiculatum L.
Paspalum vaginatum Sw.
Pennisetum americanum (L.)Leeke
Pennisetum arnhemicum F.Muell.
Pennisetum basedowii Summerh. & C.E.Hubb.
Pennisetum glaucum (L.)R.Br.
Pennisetum pedicellatum Trin. subsp. pedicellatum
Pennisetum pedicellatum Trin. subsp. unispiculum Brunken
Pennisetum polystachion (L.)J.A.Schultes subsp. polystachion
Pennisetum typhoides (Burman)Stapf & C.E.Hubb.
Perotis rara R.Br.
Pheidochloa gracilis S.T.Blake
Phragmites australis (Cav.)Trin.ex Steud.
Phragmites communis Trin.
Phragmites karka (Retz.)Trin.ex Steud.
Phragmites vallatoria (Pluk. ex L.)Veldk.
Plagiosetum = Paractaenum
Plectrachne aristiglumis Lazarides
Plectrachne bynoei C.E.Hubb.
Plectrachne contorta Lazarides
Plectrachne melvillei C.E.Hubb.
Plectrachne pungens (R.Br.)C.E.Hubb. var. callosum C.E.Hubb.
Plectrachne pungens (R.Br.)C.E.Hubb. var. pungens
Plectrachne schinzii Henrard
Plectrachne sp. Latz 2108
Plectrachne sp. Lazarides 2871
Plectrachne uniaristata Lazarides
Poa annua L.
Polypogon monspeliensis (L.)Desf.
Pseudochaetochloa australiensis A.Hitchc.
Pseudopogonatherum collinum (Balansa)A.Camus

Pseudopogonatherum contortum (Brongn.)A.Camus
Pseudopogonatherum irritans (R.Br.)A.Camus
Pseudoraphis abortiva (R.Br.)Pilger
Pseudoraphis aspera (Koenig)Pilger
Pseudoraphis minuta (Metz)Pilger
Pseudoraphis spinescens (R.Br.)Vickery

Rhynchelytrum = Melinis
Rottboellia cochinchinensis (Lour.)Clayton
Rottboellia exaltata L.f.
Rottboellia formosa R.Br.

Sacciolepis indica (L.)Chase
Sacciolepis myosuroides (R.Br.)A.Camus
Schismus barbatus (L.)Thell.
Schizachyrium crinizonatum S.T.Blake
Schizachyrium fragile (R.Br.)A.Camus
Schizachyrium obliqueberbe (Hack.)A.Camus
Schizachyrium occultum S.T.Blake
Schizachyrium pachyarthron C.A.Gardner
Schizachyrium perplexum S.T.Blake
Schizachyrium pseudeulalia (Hosok.)S.T.Blake
Sclerandrium = Germainia
Sclerandrium truncatiglume (F.Muell.ex Benth.)Stapf
Sehima nervosum (Rottler)Stapf
Setaria adhaerens (Forsskal)Chiov.
Setaria apiculata (Scribner & Merr.)Schum.
Setaria brownii Herrm.
Setaria carnei A.Hitchc.
Setaria dielsii Herrm.
Setaria oplismenoides Herrm.
Setaria pallide-fusca (Schum.)Stapf & C.E.Hubb.
Setaria pumila (Poiret)Roemer & Schultes subsp. pallide-fusca (Schum.)B.K.Simon
Setaria queenslandica Domin
Setaria surgens Stapf
Setaria verticillata (L.)P.Beauv.
Sorghum x almum Parodi
Sorghum angustum S.T.Blake
Sorghum australiense Garber & Snyder
Sorghum bicolor (L.)Moench
Sorghum brachypodum Lazarides
Sorghum bulbosum Lazarides
Sorghum ecarinatum Lazarides
Sorghum extans Lazarides
Sorghum grande Lazarides
Sorghum interjectum Lazarides
Sorghum intrans F.Muell.ex Benth.
Sorghum laxiflorum F.M.Bailey
Sorghum macrospermum Garber

Sorghum matarankense Garber & Snyder
Sorghum plumosum (R.Br.)P.Beauv. var. plumosum
Sorghum stipoideum (Ewart & J.White)C.A.Gardner & C.E.Hubb.
Sorghum timorense (Kunth)Buse
Spathia neurosa Ewart & E.Archer
Spinifex longifolius R.Br.
Sporobolus actinocladus (F.Muell.)F.Muell.
Sporobolus australasicus Domin
Sporobolus benthamii F.M.Bailey
Sporobolus blakei De Nardi ex B.K.Simon
Sporobolus caroli Mez
Sporobolus coromandelianus (Retz.)Kunth
Sporobolus lenticularis S.T.Blake
Sporobolus mitchellii (Trin.)C.E.Hubb. ex S.T.Blake
Sporobolus natalensis (Steud.)Dur. & Schinz
Sporobolus pulchellus R.Br.
Sporobolus pyramidalis P.Beauv. var. pyramidalis
Sporobolus virginicus (L.)Kunth
Stipa aquarii Vickery, S.W.L.Jacobs & Everett
Stipa centralis Vickery, S.W.L.Jacobs & Everett
Stipa feresetacea Vickery, S.W.L.Jacobs & Everett
Stipa nitida Summerh. & C.E.Hubb.
Stipa scabra Lindl. subsp. scabra
Stipa trichophylla Benth.
Symplectrodia gracilis Lazarides
Symplectrodia lanosa Lazarides

Thaumastochloa brassii C.E.Hubb.
Thaumastochloa constricta S.T.Blake
Thaumastochloa major S.T.Blake
Thaumastochloa monilifera Sosef & Koning
Thaumastochloa pubescens (Benth.)C.E.Hubb.
Thaumastochloa rubra Sosef & Koning
Thaumastochloa striata Sosef & Koning
Themeda arguens (L.)Hack.
Themeda australis(R.Br.)Stapf
Themeda avenacea (F.Muell.)Maiden & Betche
Themeda frondosa (R.Br.)Merr.
Themeda quadrivalvis (L.)Kuntze
Themeda triandra Forsskal
Thuarea involuta (G.Forster)R.Br.ex Roemer & Schultes
Thyridolepis mitchelliana (Nees)S.T.Blake
Thyridolepis multiculmis (Pilger)S.T.Blake
Thyridolepis xerophila (Domin)S.T.Blake
Tragus australianus S.T.Blake
Triodia basedowii Pritzel
Triodia burbidgeana S.W.L.Jacobs
Triodia clelandii N.T.Burb.
Triodia fitzgeraldii N.T.Burb.

Triodia hubbardii N.T.Burb.
Triodia inaequiloba N.T.Burb.
Triodia intermedia Cheel
Triodia inutilis N.T.Burb.
Triodia irritans R.Br.
Triodia longiceps J.M.Black
Triodia microstachya R.Br.
Triodia plectrachnoides N.T.Burb.
Triodia procera R.Br.
Triodia pungens R.Br. var. linearis N.T.Burb.
Triodia pungens R.Br. var. parvidentata N.T.Burb.
Triodia pungens R.Br. var. pungens
Triodia racemigera C.A.Gardner
Triodia radonensis S.W.L.Jacobs
Triodia roscida N.T.Burb.
Triodia spicata N.T.Burb.
Triodia sp. Latz 1265
Triodia stenostachya Domin
Triodia wiseana C.A.Gardner var. wiseana
Tripogon loliiformis (F.Muell.)C.E.Hubb.
Triraphis mollis R.Br.

Uranthoecium truncatum (Maiden & Betche)Stapf
Urochloa argentea (R.Br.)Hughes
Urochloa atrisola R.D.Webster
Urochloa gilesii (Benth.)Hughes subsp. *gilesii*
Urochloa holosericea (R.Br.)R.D.Webster subsp. *holosericea*
Urochloa holosericea (R.Br.)R.D.Webster subsp. *velutina* R.D.Webster
Urochloa maxima (Jacq.)R.D.Webster var. *maxima*
Urochloa mosambicensis (Hack.)Dandy
Urochloa mutica (Forsskal)Nguyen
Urochloa piligera (F.Muell.ex Benth.)R.D.Webster
Urochloa polyphylla (R.Br.)R.D.Webster
Urochloa praetervisa (Domin)Hughes
Urochloa pubigera (Roemer & Schultes)R.D.Webster
Urochloa pullulans Stapf
Urochloa reptans (L.)R.D.Webster
Urochloa rhodesiensis Stent

Vetiveria elongata (R.Br.)Stapf ex C.E.Hubb.
Vetiveria filipes (Benth.)C.E.Hubb.
Vetiveria intermedia S.T.Blake
Vetiveria pauciflora S.T.Blake
Vulpia myuros forma myuros (L.)Gmelin

Whiteochloa airoides (R.Br.)Lazarides
Whiteochloa capillipes (Benth.)Lazarides
Whiteochloa cymbiformis (Hughes)B.K.Simon
Whiteochloa multiciliata Lazarides

Whiteochloa semitonsa (F.Muell.ex Benth.)C.E.Hubb.

Xerochloa barbata R.Br.
Xerochloa imberbis R.Br.
Xerochloa laniflora Benth.

Yakirra australiensis (Domin)Lazarides & R.D.Webster var. intermedia R.D.Webster
Yakirra australiensis (Domin)Lazarides & R.D.Webster var. australiensis
Yakirra majuscula (F.Muell. ex Benth.)Lazarides & R.D.Webster
Yakirra muelleri (Hughes)Lazarides & R.D.Webster
Yakirra nulla Lazarides & R.D.Webster
Yakirra pauciflora (R.Br.)Lazarides & R.D.Webster

Zygochloa paradoxa (R.Br.)S.T.Blake

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